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UNIVERSITY OF CALIFORNIA,
IRVINE

Cultivating a Green Conscience in Corporate Culture: China's Approach to Regulating Corporate
Environmental Crime

DISSERTATION

Submitted in partial satisfaction of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

In Criminology, Law and Society

by

Natasha Pushkarna

Dissertation Committee:
Professor Emeritus Henry N. Pontell, Chair
Professor John D. Dombrink
Professor Emeritus Peter N. Grabosky

2015

DEDICATION

For my darling Sophie

I hope that this project can be a step towards achieving a cleaner and healthier future for you and your generation

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First, I would like to thank my faculty advisor and dissertation chair, Henry Pontell. His clear direction helped me to stay focused. He readily welcomed me as a new advisee and into his research group focused on white-collar crime in China. That group work ushered me into the subfield that led me to the dissertation written here. Henry helped me to hone in the project, and so I now have numerous leads to pursue for future studies. In his laconic statements of feedback, he always encouraged me to have confidence in my knowledge and work. I will carry those words with me through my career.

To my mentor, John Dombink I would like to convey deep thanks for all the support, kindness and generosity he has shown me over the years. His assurances throughout my tenure in this program have been a great comfort and source of stability for me. Thank you for all the insightful chats ranging from a variety of academic topics. Thank you also for the guidance that helped me to make the decision to pursue this area of criminology.

To my other committee member, Peter Grabosky, thank you so much for the generosity of your time. I greatly appreciated that stimulating chat in our first meeting. Your suggestions and recommendations on the topics of China, the environment, security and regulatory methods, have been immensely helpful. Your introductions to other scholars also aided me in making fieldwork contacts. One such introduction was to your former student, Lennon Chang who I also would like to thank for providing further recommendations as well as a tetrahedron image I could use here. He also introduced me to John Braithwaite and Angus Young who I would like to thank for their recommendations and insights.

I would also like to thank the original members of my dissertation proposal committee: Gilbert Geis, Jeffery Wasserstrom and Diego Vigil. Gil: I wish I had been able to interact with you more during my early days of the program, but I am so grateful to you looking out for me and guiding me into this area of criminology. Your suggestions during the defense played a big part on how this project was shaped. I am deeply appreciative that I was able to benefit from your experience and knowledge. Jeffrey: Thank you so much for agreeing to be on my proposal committee. Your work on public protests in China bolstered my interest in environmental crime there. I greatly appreciate all the help and opportunities you have offered me since our first meeting, especially the numerous introductions to China scholars.

I owe much gratitude to Susan Turner. Thank you for the support throughout the writing process. From a quiet, well-lit space in which to work to providing the necessary logistics to help me complete this last stage—thank you so very much.

I owe a debt of gratitude to Benjamin van Rooij. His dissertation was the impetus for the initial stages of this project. Subsequent communications and meetings with him provided me further

insight as I sifted through the data to reach a cohesive argument. Thank you for helping pave the way in this area of regulatory research in China, and for your support to pursue future related projects. Connected to Benjamin, I would like to thank the John S. and Marilyn Long U.S.-China Institute for Business and Law at UCI, of which he is the current chair. This institute introduced me to a handful of scholars who aided me in the research process through both their works and in individual interactions. Thank you to Joseph DiMento for first making me aware of this institute.

Thank you also to Paul Jesilow, Cheryl Maxson and Val Jenness for all of your support and advice.

From my time in the field, I would like to convey much thanks to the National Resources Defense Council and especially Barbara Finamore in offering great context for the environmental issues in China. Much thanks to Adriane Barros as well for her continued help in connecting me to possible experts and participants. Thank you for the coffee and inspiring chats. I would also like to thank Susan Finder for her advice in understanding China's legal system.

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Above all, I am grateful for the constant support and encouragement from my family. Your enduring confidence in me succeeding is what helped me pass those final hurdles to completion. Thank you for being my sounding boards. Dad, thank you for helping me refresh my perspective on days my energy lagged. Mom and Rahul, thank you especially for ensuring I made grammatical sense throughout. Lisa, thank you for checking my translations. Thank you for putting up with my frustration and cheering me up.

Thank you all for getting me to this point.

CURRICULUM VITAE

Natasha Pushkarna

EDUCATION

College

University of California, Irvine

Ph.D. (Criminology, Law & Society) 2015

Dissertation title: "Cultivating a Green Conscience in Corporate Culture: China's Approach to Regulating Corporate Environmental Crime"

Specialization in Anthropologies of Medicine, Science, and Technology 2012

M.A. (Social Ecology) 2011

Master's thesis title: "Seeking Legitimacy as a Developed Nation Through Innovation: A Case Study of India's Legal Reception of Brain Fingerprinting"

University of California, Los Angeles

B.A. (Psychology) 2007

Extensive course and laboratory work in microbiology and genetics.

High School

Hong Kong International School 2003

EMPLOYMENT

Academic Positions

Teaching Associate for the following courses:

Introduction to Criminology, Law & Society Summer 2012
Course introduces three interdisciplinary literatures: criminology, socio-legal studies, and the study of the U.S. criminal justice system. Students learn theoretical tenets on law making (from sociological, socio-legal and jurisprudential theorists), law breaking (from the classical school to contemporary criminological theories), as well as how to critically approach a variety of issues within the American criminal justice system (from enforcement to corrections).

Teaching Assistant for the following courses:

Family Law 2014
Professor: Laura Brennankane

Seminar course which uses a socio-legal lens to discuss the evolution of the “American family” from colonial to contemporary times, as well as the law’s role in regulating what is considered a “private institution”. Graded midterm and final papers and quizzes. Coordinated i-clicker (electronic remote that allows students to answer questions/polls on powerpoint) system for class participation. Organized gradebook.

Organizational Perspectives on the Legal System 2013

Professor: Samuel Gilmore

Online Masters course offered by Criminology, Law & Society Department. Covers major frameworks of organization theory and their application to the legal and criminal justice system. Students are all professionals within the criminal justice system, and thus are encouraged to critically analyze their own organizations and experiences with the discussed theory. Duties included managing the course website, running weekly forums, grading papers and advising students.

Sociology of Law 2012

Professor: Luis Daniel Gascón

Seminar course discussing the study of the operation, function, and real impacts of legal doctrine and institutions in society. Reviews the interaction between law, social structure, and cultural practice in constructing crime and its control. Presented a lecture, designed quiz and exam questions, graded (exams and writing assignment), organized gradebook, and held review session.

Immigration and Crime in the Global Context 2011

Professor: Charis Kubrin

Seminar course covering issues of race, ethnicity, globalization in the context of immigration and crime. Discusses immigration policy, perceptions of immigration in the criminal justice system and among the public, as well as human rights issues. Organized gradebook. Set-up multimedia during lecture.

Law and Social Change 2011

Professor: Rita Shah

Theoretical seminar covering how law is both a product of social change, as well as a means of achieving social change. Organized gradebook. Designed weekly quiz questions.

Victimless Crimes 2010

Professor: John Dombink

Seminar course covering various issues long-debated in America over their criminality, and relevant policies (i.e: Abortion, gambling, homosexuality/same-sex marriage, Physician-assisted suicide, Stem-cell research). Organized gradebook.

White Collar Crime 2009, 2011

Professor: Paul Jesilow

Seminar course on the history and theory of white collar crime in Europe and America. Covers introductory economics and health insurance as well. Organized grade book. Set-up multimedia during lecture. Held review sessions.

- Organized Crime 2009, 2010
Professor: John Dombrink
*Seminar on the history of organized crime in America. First time the emphasis was on the Italian mafia/Cosa Nostra, with latter half of course touching upon groups around the world (triads, Russian mob, yakuza, drug cartels, etc.) Second time the course was divided into three sections: Cosa Nostra, Asian groups emerging in America, and the Camorra. Designed exam questions. Organized gradebook. Set-up multimedia during lecture. **Presented lecture on tongs, triads and (Asian) street gangs.** Held review sessions.*
- Juvenile Delinquency 2009
Lecturer: Martha E. Blomquist
Seminar course about juvenile delinquency, covering relevant criminological theory, behavioral studies, programs and program evaluations. Organized gradebook and course website. Ran analyses on in-class, anonymous survey on students' past delinquencies and victimization with SPSS. Held review sessions.
- The Death Penalty 2008
Professor: Simon Cole
Seminar course discussing the controversy of the American death penalty. Designed weekly quiz questions and exam questions. Organized gradebook and course website. Set-up multimedia during lecture.
- Police & Change 2008
Lecturer: Edgar W. Oglesby
Seminar course charting the history of law enforcement in Western Civilization. Organized gradebook and course website.
- Research Design (Quantitative) 2008
Professor: Joanne Frattaroli
Introductory class for undergraduates to research design. Emphasizes randomized controlled trials and quasi-experimental survey designs. Guides students in conducting their own study. 350 Students. Ran weekly discussion, advised on research designs, organized gradebook.
- Introduction to Criminology, Law & Society 2007; 2012
Professors: William C. Thompson, Valerie Jenness (2007)
Professor: William C. Thompson (Winter 2012)
Professor: Donna C. Schuele (Fall 2012)
General breadth class for undergraduates in Criminology, Law & Society major. Covers the basics of criminological theory, socio-legal theory and the criminal justice system. 400 students, Ran weekly discussion (in person and online), designed quiz and exam questions, filmed lectures, held review sessions, graded papers and moderated forums. Set-up multimedia for lecture. Organized gradebook. Coordinated i-clicker (electronic remote that allows students to answer questions/polls on powerpoint) system for class participation and quizzes.

Research and Training

UCI-Department of Criminology, Law & Society 2012

1) Principal Investigator: Henry Pontell

Research assistant, prepared literature review for project, helped build project database

Led four undergraduates in collecting news media and writing preliminary content

Analyses

Organized and presented at group panel regarding project at ASC

UCI

2008

Training in ESRI/GeoInfo Systems

Presentation: **University of California, Irvine**, "Movers and Shakers: Tracking Buying and Selling Patterns of Home Owners in Ohio," 2008

Analyses of data from Drs. George Tita, Robert Greenbaum and John Hipp, as well as unemployment and poverty rates in Ohio, revealed a trend of "urban flight" to suburbia and tentatively supported Social Disorganization Theory.

UCLA- Department of Psychology

1) Principal Investigator: Paul Davies

2006-2007

Research assistant, conducted sessions, logged data

Abortion attitudes survey (focus on benevolent sexism effect)

Racial profiling—surveys on employment and criminal contexts

2) Principal Investigator: Hector Myers

2006-2007

Research assistant, designed online version of survey, recruited participants, logged and cleaned data

Study: Attitudes towards Depression among South Asian and Caucasian populations

UCLA- Department of Pathology and Laboratory Medicine (Braun Lab)

2003-2006

Principal Investigators: Jonathan Braun, Madhuri Wadhera

Research Assistant

Conducting clinical trials of epithelial membrane protein-2 effect on

- Endometriosis

- Inflammatory Bowel Disease

Contributed as third author in paper

Trained in following protocols: Immunohistochemistry, Immunofluorescence and

Bromodeoxyuridine (BrdU) Staining

PROFESSIONAL QUALIFICATIONS

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PUBLICATIONS

Adam Ghazi-Tehrani, **Natasha Pushkarna**, Puma Shen, Gilbert Geis & Henry Pontell. 2013 (2013, October). "White-collar and corporate crime in China: A comparative analysis of enforcement capacity and non-issue making," *Crime, Law & Social Change*, 60 (3), 241-260.

Contributed to UN report: "Challenges Posed by Emerging Forms of Crime that Have a Significant Impact on the Environment and Ways to Deal with it Effectively," International Sociological Association & Criminologists without Borders, Vienna, Austria. 2013

International Criminal Justice Review, 20 (1), 90-92. 2010
Review of *Psychological Injuries: Forensic Assessment, Treatment, and Law* by William J. Koch, Kevin S. Douglas, Tonia L. Nicholls & Melanie L. O'Neill (Oxford University Press, 2006).

Madhuri Wadehra, Ashley Forbes, **Natasha Pushkarna**, Lee Goodglick, 2005
Lynn K. Gordon, Carmen J. Williams, Jonathan Braun. (2005, November 15), "Epithelial membrane protein-2 regulates surface expression of $\alpha v\beta 3$ integrin in the endometrium," *Developmental Biology*, 287 (2), 336-345.

PRESENTATIONS

Applying Broken Windows Theory to the Public's Response to Corporate Environmental Crime in Contemporary China
Western Society of Criminology Conference, Honolulu, HI February 6, 2014

How Do You Mend a Broken Environment?: A Commentary on the Socio-political Effects of Pollution from Environmental Crime in China
American Society of Criminology Conference, Chicago, IL, November 14, 2012

SERVICE TO PROFESSION

Session organizer on white-collar and corporate crime in China at American Society of Criminology Conference, Chicago, IL, 2012

Reviewed for International Journal of Comparative and Applied Criminal Justice 2012

Recorded/Edited various talks and lectures for department (in training and decision-making purposes), as well as trained others on how to do this 2007-2009

Peer Mentorship and Recruiter for subsequent department cohorts (especially guiding new international students) 2008-2012

EDITING

Digital Editorial Fellow for Political and Legal Anthropology Review 2012-2013

Inaugural member selected to create virtual issues and new digital platform for journal to increase readership and expand on the current spillover section to provide a more in-depth and engaging experience for readers through the inclusion of multimedia, social media and encouraging cross-discipline conversations.

Layout Editor for UCLA's Undergraduate Science Journal 2004-2006

Asst. Layout Editor for UCLA's Undergraduate Science Journal 2003

LANGUAGES

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PROFESSIONAL ORGANIZATIONS

American Society of Criminology

Criminologists without Borders

International Sociological Association

Western Society of Criminology

ABSTRACT OF THE DISSERTATION

Cultivating a Green Conscience in Corporate Culture: China's Approach to Regulating Corporate Environmental Crime

By

Natasha Pushkarna

Doctor of Philosophy in Criminology, Law & Society

University of California, Irvine, 2015

Professor Emeritus Henry Pontell, Chair

China's accelerated development in the Post-reform era has led to the deterioration of its environment. Unfettered factories have turned the rivers red and poisonous with their unfiltered waste. Unable to ignore the physical consequences in the face of international criticism, China amended its criminal code to specify and bolster its protection of the environment in 2007. Following these changes, the country has continued to evolve its legal conceptions and approaches to corporate environmental crime, including harsh punitive measures with lengthy prison sentences, and even the possibility of the death penalty. This study incorporates the literature from white-collar criminology, green criminology and regulatory theory in its attempt to understand how China is conceptualizing and approaching corporate environmental crime through its legal system.

Using a content analysis of court judgments, legislative documents and news media from Jiangsu province, as well as in-depth interviews of professionals knowledgeable about China's environmental issues, this study finds that within the rhetoric is an attempt by the government to

urge corporations to consider maintaining a sustainable environment as part of their duty in their operating processes through both cooperative and punitive methods. The conceit of obligation lines up with the collectivist viewpoint advocated under the primary cultural traditions in China-- Confucianism and communism. Local/state corporations are likely entrenched in these traditions and thus, would be more amenable to this line of thinking when considering participation in deviant acts, such as illegal dumping or the smuggling of waste. At this early stage, corporate compliance appears more rote, but within China's larger plans to form a "green" society this green conscience could be cultivated and provide the pathway to a responsive regulatory system for handling corporate environmental crimes.

INTRODUCTION

For three days in 2009, the residents of Yancheng city were without clean drinking water due to a chemical plant tainting all nearby water sources with untreated phenol (a toxic dye) (Xinhua, 2009). In China, this type of incident had become a rather common occurrence since it initiated its accelerated industrial revolution in the late 1970s. The legal response to the perpetrator of the contamination was far different, however. While the first decade of development prioritized construction over preservation, leaving companies unfettered to release toxins without consequence, this was no longer the case in the new millennium. For the same act, amended criminal laws related to environmental protection now doled out strict punishments involving mandatory imprisonment. The aforementioned case resulted in the chairman of the Biaoxin Chemical Co., Hu Wenbiao receiving the harshest sentence to date: eleven years imprisonment (Xinhua, 2009; Li, 2009).

The severity of Hu Wenbiao's sentence is of particular significance. Charged with violating Article 115, Hu was accused of endangering public security through the spread of poison which is considered a capital offense. Within China's penal code, this is the only law applied to environmental cases that could lead to an execution. All other environmental crimes listed (e.g. the dumping or transfer of toxic waste, deforestation, smuggling of endangered species, and desecration of cultural artifacts/sites) involve penalties of no more than ten years imprisonment¹. The choice by the procuratorate (China's prosecuting agency) to apply a charge that could result in the death penalty makes a strong statement that China's legal system is shifting to a more punitive stance against environmental crime.

¹ Among those laws, variance in punishment is dependent on the degree of harm inflicted.

The potential of applying the death penalty to a frequent violation committed by corporations ignited regulatory and legal discussions about the trajectory China's legal system was taking in regards to both corporate and environmental crimes (Finamore, Wang, Wu & Xu, 2013; Li, 2009). Proponents of this decision felt it was a step in the right direction as a crackdown on polluters was sorely needed (Wang, 2010). Critics stated that it went too far, and suggested that the legal system should strengthen its preventative strategies to increase accountability (Li, 2009). What the two sides agreed on was that acts inflicting damage upon the environment must be significantly addressed by the government. This shared sentiment was one that had grown through this first decade of the new millennium.

At the start of the 21st century, the sustainability of China's environment had hit a critical point which the government could no longer ignore. Images of residents wearing gas masks to breathe through the murky brown air and of dead fish floating to the surface of waters colored red or black had become commonplace (Economy, 2004). In the years leading up to its hosting of the 2008 Olympic Games, the Chinese government drew international criticism over its high levels of pollution. Numerous concerns were raised over athletes being able to breathe, prompting some competitors to only be in Beijing for the duration of their respective competition and countries to house their athletes in Japan and South Korea (Demick, 2008; Dilly, 2007). These actions by the international community cast some doubt on China's legitimacy as a global power. Its poor environmental quality was projected to have devastating effects for the global ecosystem if nothing drastic was done to curb the pollution (White, 2010). Prior to the Olympics, there seemed little faith in China being able to provide an appropriate hosting ground (Dilly, 2007). Though drastic measures of shutting down hundreds of factories near the capital and severely restricting cars on city streets and highways offered a respite from the toxic air, they

only lasted the duration of the Games (Beyer, 2006). Within a year, Beijing had reverted back to its heavily polluted state. This in turn led to a spate of protests among the middle-class against polluting enterprises (Wasserstrom, 2009). The public dissatisfaction of the Chinese citizenry has only served to intensify the global community's watchful eye on China's environmental issues. This suggests that as close as China is to fulfilling its four-pronged drive towards modernization (i.e. development in agriculture, industry, national defense, and science and technology), without a serious addressing of the crimes being perpetrated and a holistic approach to safeguarding their environment China will not likely be accepted as a fully developed nation.

In response, China's five-year plans for the new millennium have particularly focused on reducing environmental pollution. Specifically, it “set a goal of reducing the emissions of major pollutants by 10% during the 11th five year plan period of 2006-2010” (Xinhua News Agency, 2007). In aid of this goal, the national government issued a “green GDP²” standard for local governments to meet and hopefully encourage local officials to be cognizant of enforcing environmental regulations and mandated use of environmentally-friendly equipment (Ministry of Environmental Protection, 2007). Though the legal concept of protecting the environment was first added to China's constitution back in 1978, environmental regulation has been a gradual evolution. Starting with a few administrative guidelines for waste disposal, environmental protection policy increasingly expanded into a system with administrative, civil, and criminal sanctions. Initially, civil and criminal sanctions were minimally used, emphasizing a more cooperative model of regulation (Snider, 1995). But recent years have shown an increase in public interest litigation and the use of more punitive criminal sanctions (Wang, A. L. & Gao,

² Green GDP is the calculation of a country's economic growth minus the costs of environmental degradation incurred through economic activity. These costs include both the charges to treat/clean up the pollution and any loss of resources or physical property. For example, “China's Green GDP Accounting... covers... health, agricultural and material losses caused by air pollution; health, industrial and agricultural losses, and water shortage caused by water pollution; economic loss caused by land occupation of solid wastes” (“Green GDP,” 2006).

2010; Wang, C., 2007; Zou & Zhang, 1993). In 2007, China amended its criminal code to include specific protections against acts that harm the environment. In 2011, the procuratorate (China's national agency in charge of prosecution and investigation) prosecuted 17,725 suspects on crimes of serious environmental pollution (Xinhua, 2012). This charge is punished through a criminal lawsuit for the costs of damage and subsequent clean up and/or a prison sentence from three to seven years. Wang and Gao's (2010) analysis of the newly introduced environmental courts also revealed a large number of criminal cases in Guiyang, where 70% of the 110 cases were criminal.

Despite the increase in prosecutions for environmental crimes, there are many that go unnoticed. Much of the illegal dumping occurs in cloaked darkness of night. Additionally, corporations use “tricks [like] secret underground discharge pipes, and storing wastewater in pools that flood during rainstorms,” making it difficult for authorities to pinpoint the source of the illegal waste (Stern, 2011: 303). Law enforcement is further confounded when multiple polluting factories are located close to a contaminated water source. In May 2013, foul odors from the Yangtze River in Jingjiang led to a suspension of tap water for several days. Though investigators did determine the water had been contaminated through illegal discharges, the actual perpetrating company remained a mystery. Discovering reliable evidence of contamination is also a challenge, as the deputy director of the duty-related crime prevention department (which is under the Supreme People’s Procuratorate) lamented, oftentimes the water has already been diluted before they can take a sample (Zhang, 2014).

These obstacles reveal a need by China to bolster its law enforcement of environmental crimes. Moves have been taken to do so, with increasing the authority of the main administrative agency in charge of environmental regulation by transforming it into a ministry. The central

government has hosted conferences and consultation meetings in Beijing attended by local officials, representatives from non-governmental organizations, business leaders and scholars to evaluate and determine early intervention measures that can be taken to help reduce serious violations (Finamore, et al., 2013; Chongqing Municipal Environmental Protection Bureau, 2012). These meetings represented a promising step forward to protecting the environment.

Among academics, the handling of environmental offenses committed by corporations has become a growing topic among white-collar criminologists and regulatory scholars. White-collar criminological discussions on effective regulation of corporate criminals have shown three styles: cooperative, retributive, and responsive. In regards to corporate environmental regulation, Western nations typically followed a pathway from a cooperative approach that was found to be too lax, to a punitive approach with little bite, to finally a responsive approach incorporating both cooperative and retributive styles (Comino, 2009; Gustafson, 2007; Braithwaite, 2006; 2005; Dutcher, 2005; Fortney, 2003; Geis & DiMento, 2002; Brickey, 1997; Snider, 1995). For studies on how China regulates industrial pollution, parallels have been drawn to experiences in Western nations (Stern, 2011; 2010; van Rooij, 2006; Pomeranz, 2001).

The application of Article 115 for environmental crime cases led to the question: Is China following this same path of regulatory development as Western countries? Moreover, with the ultimate end possibly being a responsive regulatory system for environmental offenses, would that work within China's pluralistic cultural context? Tang (2014) casts doubts on the effectiveness of a responsive regulatory system, due to a perceived lack of credibility within the current legal infrastructure to engender a base of trust between corporations and the government. The aforementioned meetings between enterprises and public officials are a start to building this needed trust. Paired with other regulatory means that incorporate incentives as well as harsh

sanctions as a deterrent, the components to fashion a responsive regulatory system is there. But are the harsh penalties now associated with environmental crime meant to be more of a looming threat to lend credence to a responsive regulatory system? Could any element of the moral outrage expressed by protestors who have suffered personal and monetary loss from a particular incident of environmental damage lead to a retributive motivation to introduce a punitive legal response?

This study sought to investigate the driving factors behind the recent shift to a more punitive stance against environmental crime. To address this, the following issues first needed to be addressed:

- 1) What is China's conception of (corporate) environmental crime?
- 2) How do the new harsher environmental-related criminal laws represent China's conception of corporate environmental crime?
- 3) Are there other influences, such as moral outrage (represented by protests) at play?

Given the exploratory nature of this study, a qualitative method consisting of a content analysis and semi-structured in-depth interviews was employed. An informed grounded theory approach was undertaken to analyze the data, and in doing so identified a few more specific research questions:

- 1) What are the defining harms of an environmental crime, and how are such harms taken into consideration by the legal system?
- 2) How are corporations perceived in the context of illicit pollution? What is the role of intent in determining a corporation's guilt of its illicit pollution?
- 3) What are the characteristics of the enforcement utilized for regulating environmental crimes?

4) How does this represent the country's conception of environmental crime?

While answering these questions, there was an underlying theme of duty and obligation to the legal rhetoric on regulating environmental crime. This notion feeds into China's collectivist culture, where acting for the best of the group parallels the mindset of corporate criminals committing violations to benefit the company (Kramer, 1984 in Friedrichs, 1992: 14; Frank & Lynch, 1992). Such offenses are carried out regardless of any advantages afforded the individual perpetrator. This demonstrates a sense of loyalty corporate individuals hold for their company which leads them to perceive the act of deviance as part of their duties being employees of the firm. It is this aspect that legislators are attempting to reach by redefining the obligations corporate individuals consider as part of their duty to encompass social responsibilities such as maintaining the security and vitality of society at large. This creates an interesting amalgamation of the punitive and cooperative styles seen in Western nations' attempts at regulating corporate crime. Though it provides the seeds for a responsive regulatory system, its structure is not clearly demarcated with the escalating nature of Ayres and Braithwaite's pyramid (1992). Rather this demonstrates how China is still negotiating its understandings of this illicit phenomenon and how to address it.

At this point, China's legal system has identified its measures of harm (physical, social, as well as its temporal impact), much of which is influenced by international standards and consultations with experts (Finamore, et al. 2013; World Health Organization 2012; 2009). Its approach towards corporate perpetrators is still being determined—should they be partners in regulation or dealt swiftly and harshly like other criminals? One can see influences of other nations' experiences in China's approach as authorities experiment with different enforcement

styles, but perhaps the nation's emphasis of duty is the culturally unique aspect that needs to enter criminological and regulatory discussions. It is at this intersection, this study hopes to contribute to. China is still opening up, and the phenomenon of corporate environmental crime in the mainland is only beginning to be realized. The literature has chiefly built upon Western examples. Given China's distinctive pluralistic context of communism and capitalism, current knowledge about corporate and environmental crime may be expanded and even challenged. The following section provides a review of the relevant literature that informs this study.

Literature Review

Studies of corporate environmental crime generally concern three areas of scholarship: white-collar criminology, regulatory theory, and green criminology. Each of these bodies of knowledge is still negotiating the defining terms and interactions for this criminal context. The following sections provide an overview of debates that have led to the currently accepted perspectives to understanding corporate environmental crime that helped to inform the analyses of this study.

White-collar crime

In exploring how China is conceiving of corporate environmental crime, we must first understand where the term originated from. This form of deviance falls under the subfield of white-collar crime. The phrase "white-collar crime" was coined by Edwin Sutherland in 1939, to categorize an offender that at that time had often been excused from criminal liability (see Sutherland, 1945/Tappan, 1947 debate). Sutherland defined a white-collar crime as "a crime

committed by a person of respectability and high social status in the course of his occupation” (Sutherland, 1985: 7). This definition was a representation of the United States at the time. The characteristics of high respectability and social status were strongly linked to the “captains of industry,” of whom others aspired to become. Their entrepreneurial spirit, accumulated wealth and philanthropy exemplified the American Dream, and thus, muted any perception of malevolence in any misdeed done by them or their company³. With research and policy focusing on street crimes, the scope and depth of the harm and impact white-collar crimes could wreak on society were not understood. Though Sutherland’s presidential address before the American Sociological Society in 1939 first drew attention to this form of crime, his 1949 book on his findings of observing the day-to-day operations and dealings of 85 different corporations (70 private and 15 public utility), truly laid a foundation for future scholars of white-collar criminology.

Since then, white-collar criminologists have debated the nuances of Sutherland’s definition to further capture the varying forms of “white-collar” perpetrators and crimes (Friedrichs, 1992). Edelhertz (1970) argued that there were other acts that could be categorized under white-collar crime, but were not necessarily within “the course of [one’s] occupation” (Sutherland, 1985: 7). Instead, he broadly grouped white-collar crime acts by the “nonphysical and covert” means used, and goals of obtaining more wealth, assets, or business advantage, which led to the inclusion of acts like tax fraud in the category (Edelhertz, 1970: 1; Edelhertz in Salinger, 2013).

The base of China’s definition of this area of crime is quite similar. Deviant acts such as embezzlement, tax fraud, and bribery are categorized as “economically-motivated” or just “economic” crimes. Incidences of corruption have occurred throughout various points in China's

³ Ross depicted this phenomenon in his 1907 article “The Criminaloid”.

history, but the term “economic” crime expanded and was seen as an “epidemic” after the advent of the open door policy and formation of a market economy in the 1980s (Brody & Luo, 2009; Yu, 2008). Economic policies purposely implemented to heavily encourage foreign investment also introduced elements of individualistic culture, such as the attainment of wealth, and led to an increase in economically-motivated crimes (Liu, B. J. & Wu, 2011; Liu, J., 2009; Deng & Cordilia, 1999; Schultz, 1989; Wong, 1987; Ross & Silk, 1985).

In 1997, China amended the penal code to include a comprehensive chapter covering the economically motivated crimes, titled “crimes of undermining the socialist market order” (“Laws of the PRC,” 1997). Interestingly, the acts of embezzlement and bribery were separated into their own chapter. This is likely due to most of the laws listed involving state organizations or officials in the act, and thus, could affect non-economic related contexts, such as military procedures. Though these laws do not specify the socioeconomic status of the typical perpetrator, these crimes are generally committed by those in a position of relatively high standing.

Reiss and Biderman (1980), though, questioned the requirement of high social status for this type of perpetrator, arguing that lower class people could also commit crimes while on the job. For example, a mechanic taking advantage of a customer’s lack of automotive (pricing) knowledge could inflate bills for fixing their car. The underlying commonality in this violation and one committed by a corporate executive is a betrayal of trust one has in the occupational position. The focus on the trust and expectations others have of a person in a particular profession is certainly relatable to China where its administrative and criminal laws greatly stress a failure to fulfill one’s duty. This definition, however, does not capture the particular qualities of a corporation in terms of its culture, loyalty, and morality.

Clinard and Quinney's (1973) suggested replacement of white-collar crime with two differentiated forms: "corporate crime"⁴ and "occupational crime" gets a little closer by having the former refer to crimes committed by corporate officials or the corporation itself (Clinard & Quinney, 1973). This is an important distinction as occupational crimes can involve acts against one's employer (e.g. stealing billable hours by doctoring a time stamp card), whereas corporate crime refers to transgressions that are done for the good of the company regardless of personal benefit⁵. For environmental violations committed by corporations, the primary motive for smaller companies is often maintaining the company's survival.

Kramer (1984) expounded on the definition of corporate crime by specifying the criminal acts could be that of omission or commission as a "result of deliberate decision-making (or culpable negligence) by persons who occupy structural positions within the organization as corporate executives or managers" (in Friedrichs, 1992: 14). Friedrichs (1992) also included the characterization of white-collar crime not involving direct, intentional violence. There has been, however, a movement focusing on "corporate violence," where intent by the corporation or individual executive is still up for debate (Wright, Cullen & Blankenship, 1995). It can be argued that if the alleged perpetrator was aware of the harm (be it human health/casualties or destruction of natural resources) the illegal activity could cause before committing the act, that they were at the very least being willfully negligent. Among the harmful acts a corporate entity can commit are environmental crimes. The disastrous consequences of avoidable accidents, such as in Three Mile Island, Love Canal, Bhopal, and most recently the BP oil spill viscerally demonstrate the violence that corporations can inflict. Many studies that focus on the environmental devastation caused by corporate crimes focus on large scale disasters like the ones

⁴ Sometimes referred to as "organizational crime" (Clinard, Quinney & Wildeman, 2010).

⁵ Frank & Lynch (1992) added that though the intent of corporate crime is to benefit the corporation, the individual may also benefit.

previously listed. There are those, however, that have observed ecological harm over an extended period that has led to mortifying consequences, such as the Hemlock Horrors case study, where “air emissions from the Dow Chemical plant [was] the likely source of contamination” that led to an abnormally high infant mortality rate, incidences of cancer (among humans and animals), birth defects, and other debilitating health issues (Rosoff, Pontell & Tillman, 2007: 162).

Another contribution for the corporate criminal typology was the acknowledgment of the cooperative relationship between enterprises and state institutions when committing a violation (Kramer & Michalowski, 1990). Focus on this deviant partnership led to the subcategories of state-corporate crime, and state or governmental crime. In America, where campaign contributions and lobbyists provide institutionalized opportunities for corporations to influence government officials⁶, this classification is especially informative in identifying more types of relevant criminal acts (e.g. violation of sovereignty) (Rosoff, Pontell & Tillman, 2007). Corruption of public officials through bribery would be the most common crime observed in state-corporate interactions. For the Chinese context, the chance for interactions between state and corporate entities typically occur at the local level, such as a manager bribing the inspector sent by the environmental protection bureau⁷ (EPB). In the cases collected for this project, three environmental criminal cases involved an official of the monitoring department in the EPB accepting bribes from several companies around the province to not report their infractions, and resulted in severely polluted water sources. Such occurrences and overall lack of compliance

⁶ The joint study published this year by Princeton and Northwestern revealing the United States as an oligarchy suggests the potency of this systemized interaction (Gilens & Page, 2014).

⁷ This is the name of a local environmental regulation agency office that is under the authority of the Ministry of Environmental Protection.

also stems from the “culture or ethical climate [of a] business organization” (Apel & Paternoster, 2009: 20).

A business that often conducts “under the table” deals will normalize this behavior for its employees. The lack of negative reinforcement by not being arrested for participating in incidences of bribery further solidifies this behavior as acceptable. Apel and Paternoster (2009) note that some firms will even reward employees for successfully committing certain illegal acts. Apel and Paternoster (2009) also point out that this socialization of deviance is not just limited to within a given company, but may be widespread in a particular type of industry. For corporate environmental crimes, statistics of noncompliance and released pollutants collected by the environmental protection bureaus and grassroots organizations in China have revealed high rates of incidents among textile industries (MEP, 2012). Since 2006, the Institute of Public and Environmental Affairs “recorded [over] 6,000 environmental violations by Chinese textile firms” ranging from using “secret underground pipes to discharge wastewater [to] failing to use wastewater treatment facilities” (MEP, 2012: 1; IPE, 2012: 3). These transgressions are exacerbated by the lack of local enforcement (often due to the protection of local interests, such as allowing a company to not use mandatory filtering equipment so that they can continue to operate cheaply and increase the city’s GDP faster), where even a pledge of corporate social responsibility is not enough to engender compliant behavior.

This exemplifies the interconnectedness between a business and society in developing “corporate social performance or corporate citizenship,” that cultivates an “obligation to society beyond profitability (Gibbs, 2012: 348). This sense of responsibility is built through strong “social pressure” so as to induce a moral imperative within the company’s culture, or at the very least alter its methods of operations to achieve the objectives set forth by society (Gibbs, 2012;

Wood, 1991; Ackerman & Bauer, 1976). The idea of applying social pressure to affect behavioral change (especially to bring about behavior that is good for all of society) fits seamlessly into the collectivist traditions of China. The complicated part is balancing goals for a green society “with the need to safeguard social stability and... continued... economic growth” (Stern, 2014: 74; MEP, 2007). For achieving environmentally-friendly goals through the alteration of corporate behavior various regulatory styles have been attempted. Each had their strengths and weaknesses which are discussed in the following section.

Strategies for regulating environmental crime

The concept of environmental crime was borne from grassroots activism. Mobilized by the ecological destruction from modern life, environmentalists in the 1970s called for legal recognition of the need to protect the environment (White, 2010; Burns & Lynch, 2004; Clifford & Edwards, 1998; Hedman, 1991). The consequence of continuous and rapid development was outpacing nature's ability to replenish itself and drew much concern over the health and security of citizens. Corporations were identified as the prime contributors of pollution, leading to a focus on creating regulatory guidelines for safe treatment and disposal of hazardous industrial waste. These guidelines, in turn, created the spaces for corporate-committed environmental crime. For example, corporations may fail to implement and/or maintain the necessary cleaning equipment for handling their toxic emissions in the interest of cutting costs (Brickey, 1997). The physical harm such acts of noncompliance led to were shockingly demonstrated by well-publicized cases such as, Love Canal, Three Mile Island and Bhopal. The resulting devastation of deaths, injuries, serious illnesses and destruction of property led to a public outcry for reparation and more serious sanctions against the offending enterprises (Rosoff, Pontell &

Tillman, 2007; Gustafson, 2007; Burns & Lynch, 2004; Cable & Benson, 1993; Fisse & Braithwaite, 1983).

From the mid-1980s through the early 2000s, environmental regulation increasingly involved criminal sanctions, where offenses were upgraded from misdemeanors to felonies, and involved lengthy prison sentences (Uhlmann, 2009; Gustafson, 2007; Reitze, Jr., 2003; Brickey, 1997). This was not only a phenomenon in the United States, but in Canada, Germany, Sweden, Austria and Spain as well (DiMento, 1993). This trend went hand in hand with tougher responses to white-collar crime in general during the period, where large scandals brought about more stringent laws for white-collar crimes (e.g. the 2002 Sarbanes-Oxley Act following the collapse of Enron in the prior year) (Gustafson, 2007; Dutcher, 2005).

Friedman (1965) proposed the concept of “expressive retribution” to argue the need for criminal punishment towards white-collar crime. He defined “expressive retribution” as “punishment [that] convey[s] the moral condemnation of the citizenry, [and] its outrage at the behavior” (Geis & DiMento, 2002: 362). Though Geis and DiMento (2002) point out the lack of empirical basis to Friedman's concept, the underlying notion of citizen outrage towards illicit corporate behavior can be seen in scholarly work on the influence of social movements on white-collar crime policy. Through an analysis of the Ford Pinto case, Cullen, Maakestad and Cavender's (1987) found that “prosecutions of corporate offenders became more prevalent when private citizens, academics, and members of the legal profession began to lose confidence in the trustworthiness of elites, were sensitized to issues of equal justice before the law, and broadened their view of what ‘crime’ might entail” (319). Green (2004) expands on this discussion noting that the moral element in substantive criminal legal responses to white-collar crime leads to an increased perception of wrongfulness when the criminal act involved a betrayal of trust.

The element of trust in the context of environmental crime in China is tied to the government's ability to regulate its industrial infrastructure and reduce the health risks it poses. This would explain why China's criminal code includes punishment of regulatory authorities whose oversight could lead to serious environmental consequences. This was exemplified in the case of Sichuan Chemical Co. Ltd.'s malfunctioning waste treatment equipment, where the company director of the environmental safety department was also charged and sentenced to five years in prison (van Rooij, 2010).

Meier and Short's (1985) discussion of the consideration of the risks and hazards posed by crimes, especially white-collar and corporate crime, provides further context on public perception towards such offenses on dimensions of loss of trust and immediacy of harm. The occurrence of a public protest to a factory's illegal dumping of untreated waste certainly signals the immediacy of the physical harm caused. Additionally, the protest itself could be perceived as a social harm caused by the environmental crime, motivating the Chinese government to quickly quell any stirrings of public dissatisfaction. But, as Wasserstrom (2009), points out, the novel "stroll" form of protests undertaken by the urban middle-class presents a situation where the government cannot treat the protestors as criminals disrupting the social order. And so this disruption of social order may increase the perception of harm caused by the corporate environmental crime leading to a stricter punishment.

Within academia, support for a criminal model has varied over the years (Laufer & Geis, 2002). Some argued that criminal sanctions (i.e. significantly large fines and imprisonment) provided the "most effective [way] to ensure compliance" by corporate executives, particularly due to the shaming factor (Jessup, 1999: 725; Dutcher, 2005; Reitze, Jr., 2002). Others pointed out the lack of empirical evidence of a deterrent effect of harsher sanctions on corporate

offenders, and revealed flaws in using a criminal model to regulate corporate behavior (Gustafson, 2007; Geis & DiMento, 2002; Brickey, 1997). The minimal evidence of deterrence was impacted by the fact that those sentenced to 10 years or more ended up only serving a small fraction of that time (e.g. average time served was 29 months) (Gustafson, 2007; Dutcher, 2005). Brickey (1997) noted the political and monetary sway of larger corporations had led to issues of bias in prosecutions and sentencing, where small businesses ended up being the chief targets of such punishment (Brickey, 1997). Simpson (in Geis & DiMento, 2002) found that such punitive regulation can lead to distrust between corporations and regulators, as well as defensive behavior among corporations and superficial forms of compliance.

This was followed by a shift among white-collar criminologists to focusing on cooperative regulatory models. Such models took into account the characteristics of white-collar offenders, namely that they were rational individuals with a basis of morality that could be persuaded to cooperate and ultimately self-regulate (Comino, 2009; Braithwaite, 2006; 2005; Fortney, 2003). A cooperative model also took into account potential weaknesses in the state's capacity to regulate, as well as the power differential between the corporate sector and regulators (Braithwaite, 2006; Snider, 1990). Still, a regulatory model that utilized only persuasive methods had its own share of weaknesses. Structural constraints on regulatory agencies can limit their bite, where more unscrupulous companies paid little to no heed to warnings and fines and persisted in their illicit behavior (Snider, 1995). There is also the potential of collusion between regulators and corporations (van den Heuvel in Laufer & Geis, 2002). Braithwaite and Ayres (1992) proposed a theory of regulation that offered a balance between the retributive and persuasive models: responsive regulation.

Responsive regulation is a pyramid-based system, which entails a series of escalating⁸ punishments agreed to by the participating corporation and regulators. This model provides the flexibility to tailor regulation to a given corporate context, for which Fortney (2003) strongly advocated. Though a particular responsive regulatory system could consist of all administrative measures (e.g. ranging from warnings to license revocation), it could also include civil and criminal sanctions. In fact, Braithwaite (2006; 2005) recommended the inclusion of criminal sanctions for the upper levels of an environmental regulatory pyramid. The combination of criminal and cooperative models within a regulatory system was supported by the notion that criminal sanctions as an ultimate punishment lent credibility to the regulatory system as a whole (Comino, 2009; Braithwaite, 2006; Laufer & Geis, 2002; Brickey, 1997). The results of Simpson's (2007) survey study comparing the effectiveness of deterrence and cooperative strategies in engendering compliance with environmental law suggested that the combination of formal and informal sanctions worked best. Since its initial conception, the responsive regulation model has been differentiated into three types: “smart regulation,” “nodal”/“strength-based regulation,” and “really responsive regulation” (Mascini & Van Wijk, 2009). Each differs in emphasis: smart regulation focuses on the use of multiple regulatory instruments, nodal-based regulation encourages a partnership between regulators and stakeholders, and really responsive regulation takes into account the “internal dynamics of regulatory agencies” (Mascini & Van Wijk, 2009: 28).

Thus far, responsive regulation has been primarily implemented in Western nations such as Australia, Canada, Denmark, the Netherlands, the UK, and the US (Mascini & Van Wijk, 2009). The system has been applied to a variety of corporate contexts, from taxes to labor

⁸ As part of the model's responsive nature, regulators can scale down the sanctions when the regulated entity improves its performance.

disputes to the environment (Mascini & Van Wijk, 2009; Braithwaite, 2005; Job & Honaker, 2003). Despite the promising qualities in theory, responsive regulation has faced problems in practice. Interference by politicians and managers reducing the discretion of regulators was found to hinder the reflexive quality the responsive regulatory system intends (Mascini & Van Wijk, 2009; Waller, 2007; Braithwaite, J., Makkai & Braithwaite, V., 2007). Waller (2007), as well as Braithwaite, et al. (2007) observed this with the Australian Taxation Office. The Dutch Food and Consumer Product Safety Authority, studied by Mascini and Van Wijk (2009), also experienced such meddling, albeit to a lesser extent. Mascini and Van Wijk are optimistic that this discovery can be incorporated into the theory to improve future applications of responsive regulation. Gunningham and Grabosky's (1998) expansion of the regulatory pyramid possibly remedies such obstacles.

Gunningham and Grabosky (1998) suggest that responsive regulation is not only performed through state institutions, but non-state actors as well⁹. They conceived of a tetrahedron to encompass the various hybrid and independent regulatory actions that a regulatory system involving the government, third parties (both commercial and non-commercial) and the regulated business can potentially implement. In this version of responsive regulation, a method such as “an importer...requir[ing] a product be independently certified...if a producer wants to sell to” them is included (Chang, 2012: 98; Grabosky, 2012). Together the three types of regulatory actors create a more comprehensive and supported system, where weaknesses of one type of regulator is compensated by the strengths of another. In this regard, Braithwaite's (2006) version of the responsive regulatory pyramid for developing nations (discussed in the following section) is quite similar.

⁹ Ayres and Braithwaite (1992; 1991) did speculate on the promising avenue of tripartism where third-parties can interact and aid with the existing state regulatory system, but their primary proposal of the responsive regulatory pyramid focused solely on the state's role (Grabosky, 1997).

Responsive regulation in a developing nation context

Braithwaite (2006) contends that the weakness of a developing state's ability to regulate is actually the reason to implement a responsive regulatory system. Hypothesizing on the potential implementation of responsive regulation in countries such as Afghanistan, Brazil, India, South Korea and Zaire¹⁰, Braithwaite (2006) purposely over-generalizes the lack of state capacity for enforcement in his discussion and investigates other potential actors and forms of regulation to compensate. Drawing from prior interviews, Braithwaite notes that international actors can play a significant role in regulating fraudulent behavior in developing economies. Such actors can include global accounting firms, the International Telecommunications Union, or non-governmental organizations (NGOs). In his discussion, Braithwaite stresses the importance of cultivating multiple relationships with external network actors, such as the pairing of international and domestic NGOs. Along the lines of Braithwaite's predictions for developing nations, work in various countries such as Brazil, India, and Turkey have emphasized the supportive role of non-state actors, particularly at the community level (e.g. NGOs, neighborhood associations, labor unions, and professional groups) (Kayaalp, 2012; Coslovsky, 2011; Biradavolu, Burris, George, Jena & Blankenship, 2009). In each of these studies the primary group attempting a relational form of regulation sets up a well-structured foundational base, but the lack of resources typically hindered the group's operations. External collaborations allowed the necessary funds and workforce to proceed in regulating police, labor, and environmental practices, as well as the tobacco industry (Kayaalp, 2012; Coslovsky, 2011; Biradvaolu, et al., 2009).

¹⁰ Now known as the Democratic Republic of the Congo.

Under the presumption that these nations' capacity to regulate is weak, Braithwaite (2006) proposed a regulatory system consisting of numerous partnerships to support the state's regulatory agency. Through informal sanctions such as consumer boycotts, naming and shaming, and strikes, NGOs can help governmental authorities keep corporations accountable. Laufer and Geis (2002) further point out how a third party like an NGO can act as a check for both the regulated and regulator, providing a promising way to ensure full compliance. In the context of environmental regulation, this discussion on an elevated role for non-governmental organizations (NGOs) is of particular interest.

The white-collar literature has shown that environmental activism through NGOs and grassroots groups can be an important factor in increasing the accountability of corporations. One example is provided by Cable and Benson (1993) who observed how “grassroots environmental organizations pressured the [Nuclear Regulatory Commission] to conduct formal hearings [regarding] the restart issue” at Three Mile Island (473). These hearings led to the discovery that the accident was actually due to mismanagement and resulted in a federal indictment (Cable & Benson, 1993). Furthermore, under the recommendation of President Carter’s Kemeny Commission, the nuclear power industry established a “private regulatory bureaucracy” known as the Institute of Nuclear Power Operations (Rees, 1996: 2; INPO, 2012). More recently in the Netherlands, Greenpeace published ratings on how environmentally-friendly the products of various computer and cellular companies were, which led to the worst offenders adopting new measures to reduce the toxicity of their products and operations (van Erp & Huisman, 2010).

In China, environmental activism has been growing. Currently there are over 2,000 domestically registered environmental NGOs (Stalley & Yang, 2006). A few years ago, one

environmental NGO had an online database of the worst polluting enterprises in China-- a classic example of the naming and shaming technique (Lamont & Hille, 2010). The site, however, has been taken down, indicating the rather muzzled state of environmental NGOs in China. In general, these organizations have basically served as educators to the public on existing environmental policy and (state-approved) issues (Xu, 2008). Xu (2008), as well as Stalley and Yang (2006), suggest that it is the requirement that all registered NGOs in China must have an official sponsor that place NGOs in a less confrontational position. Wong (2003) also points out that many NGOs are specifically “established to meet government agency objectives” (17). Namely, NGOs registered with the government have become mouthpieces to educate the public, and even set up official channels for public involvement in reporting illicit pollution. Though it sounds promising, the execution of the latter is questionable. The relationship between the Chinese government and environmental NGOs appears to reduce the capacity of NGOs to support regulation as envisioned by Braithwaite. As a significant economic power in the international community, it is possible that China believes itself developed enough to not want or need third parties to be involved in one of its regulatory systems. In demonstration of that belief, China has become a powerful player in the World Trade Organization, where it is now so familiar with the rules it has been able to create outcomes that were never considered before (Gao, 2011). For now, it is unclear whether the limited capacity for NGOs to support environmental regulatory measures in China means a responsive regulatory system is currently not feasible for China.

Green Criminology

The criminological field's approach to studying environmental crime has been a contentious one. Early studies attempting to define environmental harms were conducted by non-criminological fields such as epidemiology. But as legal systems began to acknowledge a need to criminalize acts that damage the ecosystem, criminologists began to enter the fray. The topical area of environmental crime started off as a subset within the subfields of white-collar criminology and critical criminology. Under white-collar criminology, environmental crime was brought up as one form of misconduct by corporations, which could inflict a great deal of violence upon society (Rosoff, Pontell & Tillman, 2007; Jessup, 1999; Frank & Lynch, 1992). Initial studies used a legalist perspective that stated "environmental crimes [were essentially] the creation of environmental laws" (Situ-Liu & Emmons, 1999: 4; Clifford & Edwards, 1998).

Focusing on solely legal definitions of environmental harm may be helpful for initial explorations of state perceptions of this form of deviance, but had many limitations as an approach (Gibbs, Gore, McGarrell & Rivers, 2009; White, 2008). By staying within the constraints of written law, such research was susceptible to biases inherent in the codified laws. The uncertainty in the standards used as the foundational basis for laws and regulations easily favored corporations by providing areas of plausible ignorance. For example, companies could claim they were unaware about a given chemical in their industrial waste being detrimental to the ecosystem, or argue that more time was required to acquire and implement environmentally-friendly equipment. For operations that involve a global supply chain, the actual responsible party of any criminal liability may be unknown (Heckenberg, 2010; White, 2008; Rosoff, Pontell & Tillman, 2007).

In response, critical criminologists attempted to capture the harms not officially recognized by offering several variations of a social justice view on what constitutes an

“environmental crime” (Brisman, 2010; Takemura, 2010; Lynch & Stretsky, 2003). Lynch and Stretsky (2003) first proposed two contrasting approaches on the interactions between corporations and the environment. One takes on a viewpoint in favor of corporate interests, and utilizes the "redefinitions" put forth by corporations attempting to gain the public's good will and trust in its products. Greer and Bruno (1996) referred to this redefinition strategy as "greenwashing," capturing the act's ability to redirect the public's attention away from the real ecological issues and head off any rumblings of activism. Instead of halting destructive operations, like hydraulic fracturing¹¹, companies publicize an illusion of being environmentally-friendly through participation in green initiatives that have no bearing on the actual business operations. Lynch and Stretsky (2003) acknowledged how severely limiting this corporate proposed perspective of what constitutes "green" behavior would be for criminologists. The primary merit of using this interpretation would be for studies interested in organizational theory, where they may seek to understand how corporations conceive of environmental problems and how that conception impacts their operations.

The other perspective introduced an environmental justice view, which covered differing focal points of discrimination: sexism, racism, and classism. Among these branches, the scholars who concentrated on the exploitation of lower socioeconomic classes have self-identified as the "red-green" movement. The "red-green" movement is steeped in Marxist discourse and attributes "economic oppression to environmental degradation" (Lynch & Stretsky, 2003: 224). Each of these justice perspectives branched out into their own factions within the loosely grouped scholarship of “green criminology.”

¹¹ A technique used to extract natural gas or petroleum by using hydraulically pressurized liquid to form rock fissures in identified oil/gas wells.

These offshoots faced their own criticisms. Halsey (2004) took issue with the emphasis on a Marxist interpretation among environmental justice studies arguing that it limits understanding of the motivations behind environmental damage. Namely, it is not reflexive enough in how it identifies the areas of difference and inequality, imposing dominant Western ideals and making assumptions that are entangled in the illusory gratification consumer culture pushes. Others attacked its anthropocentrism, putting forth a biocentric frame to define “environmental harm as any human activity that disrupts a biotic system” (Gibbs, et al., 2009: 4). To expand the scope of the biocentric frame to a global scope and also bridge policy with theory, Al-Damkhi, et al. (2009) suggested using “sustainability [as a way of] articulating and measuring the damage caused by environmental aggression” (120).

The lack of consensus on what constitutes an environmental crime casts doubts upon this topical area meriting being its own subfield of criminology. A handful of scholars have attempted to put forth more encompassing definitions and an overarching term for the emerging area of scholarship. Suggested names thus far have been green criminology, eco-criminology, and conservation criminology. Among these, green criminology is the most commonly used term to refer to inquiries into issues related to environmental harms. It is purposefully broad to encapsulate the complex nature of the consequences of environmental degradation, but incorporates the responsibility humankind has to take care of nature and its finite resources in its analyses (Potter, 2012; Ruggiero & South, 2010; White, 2008; 2003). Eco-criminology is similar to the environmental justice view proposed by Lynch & Stretsky in its attribution of ecological harms to the pursuit of economic advantage and often at the expense of the livelihood of the poor and marginalized. Its point of expansion is that it incorporates the “discourses on risk, rights, and regulation” (Muncie, Talbot & Walters, 2010: 181; Westra, 2004). Under an

eco-criminological perspective, resultant environmental damages are considered “human rights violations,” alluding to a global scale for this area of criminology¹². The notion of risk is also a major component of the most recently proposed representative term: conservation criminology. Conservation criminology is a broad framework proposed by Gibbs, Gore, McGarrell, and Rivers III (2009) to encompass a multitude of environmentally-related issues. This framework consists of an interdisciplinary approach combining criminology, natural resource management, and risk and decision science. By incorporating all three, this approach allows scholars to work with a more comprehensive definition of “environmental crime.” Gibbs, et al. (2009) hoped that the collaboration between these perspectives would also bring flexibility and neutrality to the suggested structure so as to better capture the dynamic quality of environmental crime.

Being adaptive to that dynamism is an important characteristic for scholars to keep in mind when undertaking research in this area. Environmental law and the specific notion of “environmental crime” are considerably new and still evolving within nations, as well as internationally. This is true of the current state of China’s environmental regulation. Furthermore, by combining multiple disciplines, this framework generally avoids “assumptions about the causes and solutions to environmental risks, [as well as, limiting a study’s scope to an] anthropogenic or eco-centric definition of the problem or of potential interventions” (Gibbs, et al., 2009: 16). The unique offerings of the three disciplines within this framework also provide an informative basis for this dissertation’s exploration of China’s legal response to a particular form of corporate environmental crime: illegal dumping of toxic waste. For example, the risk and decision component could help inform the type of considerations China’s National People’s Congress and Ministry of Environmental Protection make when determining any new regulatory policy. Though this study’s focus is typical of the case studies investigated through a strict

¹² Due to this aspect, this suggested term is sometimes noted as eco-global criminology (White, 2012).

legalist interpretation, the non-Western and pluralistic social setting calls for a much broader scope. Utilizing the conservation criminological structure seems appropriately flexible to account for socio-political influences possibly behind China's tougher legal responses to environmental crime. Being built on inductive reasoning, Gibbs, et al.'s (2009) conservative criminological approach is in line with the exploratory nature of the study and its chosen qualitative methodology.

Project Significance

This dissertation lies at the intersection of three areas of scholarship that are still arguably emerging: white-collar criminology, regulatory theory, and green (or specifically, conservation) criminology. For each of these areas, foundational concepts have stemmed from primarily Western settings. In recent years, comparative studies have attempted to capture nuanced differences in developing, non-Western countries like Brazil. With China's exponential rise as an economic power, expeditious development, and environmental issues that pose a threat globally, it is an important locale in which to pursue academic research (White, 2010). Thus far, China is still a rather uncharted territory for criminological scholarship, particularly within the field of white-collar crime. Seeing how China perceives and punishes corporate perpetrators of environmental harm may provide an extension of how corporate criminals are defined and offer a cultural element to the image of the corporate criminal.

The topic of corporate environmental crime is a mixture of contested definitions. Delving into how China is grappling with this concept may bring to light certain aspects that have not been considered in the past, or even confirm certain characteristics that have been suggested in the literature. This dissertation hopes to contribute a starting point of expansion for

conceptualizations of this type of crime, as well as inform future environmentally-related policies in China. Specifically, China's criminal justice response has not been covered in detail regarding its handling of environmental incidents. With criminal cases on the rise and release of the judgments online, this study hopes to be an initial step forward into future research on environmentally-related criminal prosecutions (Jiangsu Province Higher People's Court, 2014). This study can be used as a stepping stone to further research into the criminal justice system's approach against corporate environmental crime, and potentially inform future policy discussions on this area of law more generally, and, more specifically in regard to China.

Structure of Dissertation

The dissertation is organized as follows: Chapter two offers background on China's legal system, the evolution of environmental law and the organizational structure of enforcement. Cultural and historical influences are strongly considered in this discussion highlighting the clashes and commonalities between China's pluralistic value systems of Confucianism, communism and capitalism. The points of conflict help explain how crimes like corporate environmental crime became a norm in the country, while areas of overlap between the three dogmas inform the current legal infrastructure processes. Chapter three reviews the methodology used for this study. Due to the qualitative method chosen for this study, the coding process is also detailed to show how the overall theme of duty/obligation emerged as particularly pertinent to China's legal response to environmental crime.

Chapter four through six present the main categories used for the analysis: harm, intent and enforcement style. Specifically, chapter four discusses how China, through its courts and legislation, conceives of (corporate) environmental crime, drawing from the literature on

corporate violence, and conservation criminology. Chapter five delves into the perception of corporations and determination of intent and liability in corporate environmental crimes. Given the importance industrial corporate entities have had for China's exponential economic growth the tension between positive and negative views of corporations is especially stressed in this chapter's discussion of the legal system's approach to punishing violators. Chapter six examines the forms China has used from the three different enforcement styles currently recognized in the criminological field: cooperative, punitive and responsive regulation. Throughout the chapter, the issues faced within each model are discussed. The chapter concludes with a proposed model of how China may be able to structure and implement a responsive regulatory model for corporate environmental practices. This model builds upon the responsive regulatory pyramids discussed earlier in this chapter, as well as Gunningham and Grabosky's 1998 tetrahedron. Within this model the potential of non-state actors as regulators is tentatively included. Chapter seven explores that possibility further. Taking from responsive regulatory discussions, particularly Braithwaite (2006) and Grabosky (2012), the external influences of domestic and international non-state actors are considered. In conclusion, chapter eight summarizes this project's contribution to the field, and discusses future avenues to pursue by Chinese legislators for environmental policy, and by scholars in this area of criminological research.

CHAPTER TWO

Overview of the history of environmental regulation in Contemporary China

In embarking on an analysis of China's legal system, it is important to understand its cultural and historical influences. The second half of the twentieth century, which saw the founding of the People's Republic of China, was filled with violent upheaval and various attempts at rebuilding society's infrastructure. Despite the purging of intellectuals and scholarship during the Cultural Revolution, Confucian and Western ideologies have gradually made a comeback in contemporary China (Roberts, 2012; Herrmann-Pillath, 2011; Sheng, 2010). Deng Xiao Ping's Open Door Policy in 1978 ushered in an era of reform, allowing once again for foreign investment within China's borders, and initiated what has now become an unprecedented level of development (Wasserstrom, 2003; Bejesky, 2002; Nishitateno, 1983). At the same time, environmental regulation began its slow evolution. Through its economic expansion, China finds itself in a unique situation of pluralistic values from communism, Confucianism, and capitalism. The clashes among these dogmas have created an anomic and criminogenic setting which allowed corporate deviance to proliferate (Liu, 2009). Yet, their commonalities have helped to inform legal responses to crimes enacted by enterprises, especially transgressions against the environment. Starting with a detailed discussion of these influences, this chapter provides an overview of the progression and organization of China's environmental regulation within the overall legal system.

The Moral Basis of Confucianism

For much of China's history, Confucian values have provided a foundation for society. The teachings of philosopher Confucius offered guidance on moral behavior and relations, emphasizing loyalty and filial piety. The focus on family offered the base unit for a potential governance structure from the rules Confucius spouted. This line of thinking indicated how every person had their place within society and how that status entailed certain responsibilities. For contemporary China, one's duties are precisely laid out in the legal system with seemingly a ministry or bureau for every aspect of life, each with a comprehensive set of procedural laws. Relayed in this study's interview with "Government Official 1" (GO1), fulfilling the required obligations of one's position is particularly stressed as doing so allows one to pursue higher positions in government.

Such focus on upward mobility occurs in industry as well (Cao, Lemmon, Pan, Qian & Tian, 2011; Li & Zhou, 2005). The government often appoints people into executive positions of state-owned enterprises (SOE). An incentive program has also added the chance for those in management to be promoted into a political position (Cao, et al., 2011). The cases of this study were not solely state-owned enterprises, but rather joint ventures with foreign partners, but as Gao (2011) noted there has been a trend among such enterprises in China to have foreign shareholders as silent partners, and thus are comparable to SOEs more than a purely foreign-owned company.

Prior to the formalized and expansive bureaucratic structure of China's legal system, rules were informally enforced and passed on through deference to tradition. Known as "li" (礼), social mores were conducted through meticulous rituals (Bejesky, 2002). This form of social control worked well in the dynastic period, and particularly thrived during the Han and Tang dynasties. Typically, conflicts were handled through personal negotiations than involving

any governmental intervention. At this more intimate level, the aim under Confucianism as a legal philosophy was to engender shame in the individual for deviating from acceptable behavior.

The concept of shame was a strong force within the Chinese culture, as a person's transgression also damaged the reputation of their family, or organization with which they held an affiliation. The impact on the standing of all those connected to the deviant individual brought about the need to "save face," so that all affected individuals could still be accepted by society. This was usually achieved through minimizing the consequential harm, and resolving the conflict as quickly as possible. Western audiences are familiar with this process from Braithwaite's (1989) reintegrative shaming theory and restorative justice procedures. As in reintegrative shaming theory, Confucianism believed in the inherent good of people. Malfeasant individuals could be rehabilitated to become productive members of society. Much like the remedies for balancing the harms with appropriate reparations in restorative justice procedures, the negotiations under Confucianism aimed to restore social harmony with its resolutions.

Though this fit well in the "li" system, the entrenched nature of shaming in Chinese culture has led it to still be a part of the current legal system. Judges chastise criminal defendants during trial. They also show leniency in sentencing defendants who demonstrate remorse over their actions (Liebman, 2014; Liu, Zhao, Xiong & Gong, 2012; McConville, 2011). That internalization of guilt and acceptance that their behavior was wrong is what Confucianists believed allowed the deviant individual to learn and become a contributing member to society. It is these elements of reintegrative shaming in China's criminal justice system that can be used to foster a duty to the environment among corporate executives and help lay the ground work for a responsive form of (corporate) environmental regulation.

Maoism, Collectivism, and China's contemporary legal system

Under Mao, philosophical works such as Confucianism were purged from acceptable culture. Deemed a relic of an imperialist era where the elite held all the advantages, Mao introduced his interpretation of communist ideals, known as Maoism. His vision formed a society of “agricultural collectivism” and fomented constant revolution. Following the Cultural Revolution, the Chinese Communist Party (CCP) attempted to supplant the biases inherent in the legal system that had taken a person’s stature into account by having “those accused of crimes... judged [solely] on the degree of harm their actions caused society” (Bejesky, 2002: 36). Though this ideal became twisted in trials against those deemed “enemies” of the CCP during Mao’s reign, current law and interpretations issued by the Supreme People’s Court (SPC), Supreme People’s Procuratorate (SPP), and the National People’s Congress (NPC) are structured on determining the severity of penalties and criminal liability by the level of harm caused. Despite the equality represented in the *letter* of the law, studies have shown a strong bias against the poor and uneducated in prosecutions (Stern, 2014; van Rooij, 2006). Judges attempt to mitigate this by issuing the minimum associated punishment (McConville, 2011). Yet, political connections do appear to protect alleged perpetrators from prosecution (Tang, 2014; McConville, 2011).

Though Maoism was introduced in opposition to Confucianism as a philosophical basis for structuring society, the two ideologies do share a common base: a group orientation. This collectivist viewpoint prioritizes the group over the individual. Actions are deemed appropriate in regards to what brings about the greater good, which in China’s context is typically framed in the rhetoric of maintaining a safe and harmonious society. Much like cogs in a machine, each

person has their role in helping to achieve that goal. This is expressly seen through the emphasis of duty in contemporary Chinese legislation and reinforced in legal interpretations.

Opening the door to capitalist values

In 1978, Deng Xiao Ping initiated a reform era for China with the open door policy. As part of China's overall modernization goals, this policy specifically aimed to entice foreign investment and trade within the nation's borders. Due to concerns by conservative leaders in the CCP of exposing the populace to Western ideologies, this policy was constrained to specific and geographically limited areas, known as special economic zones (SEZ) (Alder, Shao & Zilibotti, 2012). The first four SEZs were created within the southeastern provinces of Guangdong and Fujian. These SEZs followed fiscal policies designed to give preferential treatment to foreign enterprises in terms of taxes, land, and labor use (Nishitaten, 1983). Given the different regulations for these areas compared to the rest of the country, a separate administrative office was formed in each province to handle any matters in the SEZ. This specialized system greatly favored corporations and fed into the mindset at the time of development at any cost.

Though the success of these zones varied, the overall experiment was positive enough for the government to expand the number of zones (Gopalkrishnan, 2007; Wong; 1987). Between 1984 and 1992, SEZs were formed in 14 coastal cities, Hainan province, 6 Yangtze River ports, and 11 border cities (Liu & Wu, 2009). The zones were also diversified into Economic Technological Development Zones (ETDZ) that were governed by the Ministry of Commerce and Science and Technological Industrial Parks (STIP) which were under the Ministry of Science and Technology's authority (Liu & Wu, 2009). Between these two categories, STIPs

specifically focused on high-tech industries within their confines, as well as local firms to bolster China's achievements in technology (Liu & Wu, 2009). Both types worked to accelerate the country's economic growth, which in this new millennium reached unprecedented heights.

In the plans to bring China on par with developed nations around the world, SEZs were also seen as opportunities to gain knowledge of technological advancements and managerial strategies from foreign enterprises (Alder, Shao & Zilibotti, 2012; Liu & Wu, 2009; Wong, 1987). This study's interview with GO1 confirmed this as a continued trend with numerous references to the latest German technology being used in the local water treatment system. Though the use of that technology in the present day water treatment system demonstrates the success of the information exchange from the SEZs, other Western ideas did not fare so well.

Despite the push by reformists like Deng to open up China and learn ways to modernize from other nations, the conservative contingent within the CCP was resistant to the whole plan (Alder, Shao & Zilibotti, 2012). These leaders begrudgingly agreed to the creation of SEZs as they were intended to keep any non-state influences limited within the narrow borders of these zones. With the success of these zones, Deng was emboldened to expand the industrialization along the coasts and gradually into the nation's interior. The sudden urbanization of towns imposed an unfamiliar setting on residents. Some were completely displaced, leading to a floating population attempting to find homes in the city (Zhang, Messner & Liu, 2007; Robinson, 2003; Li & Rees, 2000). The sudden rise of population in the cities reduced law enforcement's ability to maintain a complete record of residents and consequently, reduced accountability among the populace. Informal social controls were also weakened due to the lack of any existing relationships with the new denizens (Zhang, Messner & Liu, 2007).

Criminologists have applied the theories of anomie and social disorganization to explain the rise in crime (both violent and non-violent) during this time (Cheng & Ma, 2009; Yu, 2008; Cao, 2007; Zhang, Messner & Liu, 2007; Liu, 2006; 2004; Deng & Cordelia, 1999). Capitalist values began to seep into the public consciousness through encouraged consumerism (Pomeranz, 2001). Materialism became a priority and younger generations were more concerned with their individual achievements and acquirement of wealth. This clashed with traditional views held by older generations regarding working for the greater good. One of these clashes resulted in the accumulation of expensive items, especially by those with political ties, to be regarded with suspicion. In response, the government passed laws limiting the type of purchases and gifts those in the party could possess.

Another clash came through the increase in savviness with modern technology among urbanites. A newly fashioned “middle class” in China, people within this class began to adapt to their new standard of living. With increased access to international examples through online media and social networks these middle class citizens began to fight to maintain or improve that standard. Wasserstrom (2009) observed their impressive use of online social media and texting to coordinate numerous demonstrations in different coastal cities against construction projects that would greatly damage the environmental quality of their homes. These protests were conducted in a uniquely peaceful manner and stayed within legal constraints with individuals strolling back and forth on a crosswalk only when the light was green (Wasserstrom, 2009; Watts, 2008).

These environmental protests were generally tolerated by the CCP, but as this phenomenon began to spread through the country, some turning violent, the government started to clamp down. In the instance of the Kunming and Haimen protests which both lasted for

several days, the typical show of blustering force was utilized, but this form of control had only a short term effect. As with its citizenry, the Chinese government began to increase its presence online, starting official accounts on Weibo (China's main social media platform). In doing so, it could better control the information disseminated about cases (such as the Bo Xi Lai case in 2013) and major incidents like a chemical spill contaminating the water supply. This method exemplified one of the ways China had to adapt its socialist legal structure to reform and evolve to the new situations cropping up from the current pluralistic setting. The following section discusses an overview of the legal system and brings up areas that have been introduced or adapted to better respond to the country's environmental issues.

Overview of China's Legal System

China utilizes a civil law system, where decisions are informed through statutory law rather than a precedent set by past cases. China's legal system is built on three pillars: the people's court system, the procuratorate system, and the public security system. Each sector consists of paralleled hierarchies from the local to the national level. The following sections will detail each part of the system and their interactions.

People's Court System

China's court system is organized by the following four tiers (in ascending order): the basic people's courts, the intermediate people's courts, the higher people's courts, and the Supreme People's Court. The first three tiers are local courts within the provinces. Basic people's courts are located in counties or municipal districts in each province. Under these

courts are people's tribunals for the smaller, more rural townships and villages within those counties. First instance criminal and civil cases fall under the purview of basic people's courts. Criminal cases that carry the death penalty or life imprisonment are not handled by these courts. For such cases, of which some corporate environmental crimes have fallen under, begin at the intermediate people's court level. Intermediate people's courts, located in the major cities of a province, also typically handle cases that involve foreign parties and any other case transferred by the basic people's court. At the provincial level, are the higher people's courts, which rule on cases that affect the entire province, as well as any appeals and petitions against judgments determined by the lower courts ("A brief introduction," 2014).

The final court in the land is the Supreme People's Court (SPC), located in the capital city, Beijing. Besides appeals from the lower level courts of general jurisdiction, the SPC also hears appeals from cases held in the four types of specialty courts: military, railway transportation, maritime, and forestry ("A brief introduction," 2014). In line with the top-down nature of China's governance structure, the SPC issues interpretation to guide the lower level courts on how to proceed with a given case type. These interpretations offer a more specific definition of the acts deemed liable for a particular case. In the context of an environmental criminal case, the SPC delineated the minimum standards for what should be considered "serious consequential harm," such as, "at least one death" (SPC, 2006; 2013). For areas of law that are still evolving, such as environmental crime and economic crimes, the SPC's interpretations are especially important as they provide the needed nuances and uniformity for all courts to rule on these cases.

As part of the legal reform to better address environmental issues, the Chinese legal system has recently begun to formulate specialty environmental courts (Stern, 2014; Wang &

Gao, 2010). Starting in 2007, three cities (Guiyang, Wuxi, and Kunming) established specialty environmental courts in response to address pressing ecological outbreaks/incidents (Wang & Gao, 2010). Paired with the government's increased attention to protecting the environment, these courts were seen as a positive step forward for environmental litigation, as it allowed for "greater consistency in application of the law [and] improved [the] proficiency of environmental judges¹" (Wang & Gao, 2010: 47). Since then, 130 total environmental courts have been created throughout the country (Stern, 2014). Despite the growth of this type of specialty court, environmental courts are currently considered to be in the experimental stage with their continued use up for debate (Stern, 2014).

Environmental-related cases are still heard in the basic and intermediate courts, as evidenced by the cases culled for this study's analysis. Among the cases collected and analyzed for this study were essentially the environmental protection bureau seeking support from the court to enforce administrative sanctions against perpetually delinquent companies. Stern (2014) did observe a high rate of these type of cases in the Wuxi environmental court (located in Jiangsu province), attributing it to a close, cooperative relationship between the court and public security sector. In contrast she discovered a push by judges in Guiyang for the bureau to resolve the cases without court intervention as much as possible (Stern, 2014).

Judges

In China, judges are appointed by the local people's congress generally placing them in a more administrative capacity. Their autonomy is minimal with interpretations and guiding

¹ The training and background of judges for all areas of law still has great variance, due to the acceptance of judges with no formal degree or extensive legal experience prior to 1983. Though amendments introduced in the 1990s raised the bar and instituted an exam, those who had already been sitting as judges were not required to take that exam (McConville, 2011).

procedures issued to them from the National People's Congress and the Supreme People's Court on how to proceed with a particular type of case. In court, an odd numbered panel, ranging from three to seven judges, presides over the trial. A majority vote determines the case result (Belkin, 2000). Trials follow an inquisitorial format with the aim to ascertain the "singular" truth of a person being guilty of a crime. After the 1996 Criminal Procedure Law was implemented, the legal system attempted to shift to a more adversarial style, and form a rule *of* law basis (Cohen, 2004). Political pressures and underlying biases within the legal structure has prevented any substantive progress along these lines (McConville, 2011).

Judges have been observed to be involved in the stages prior to trial, such as contacting "the police [to conduct a] supplementary investigation" (McConville, 2011: 160). The primary motivation for this was conveyed in McConville's (2011) survey of Chinese judges, where it was revealed that some judges felt that such prior involvement was the only way to ensure they fulfilled their duty to decide on cases after examining relevant facts and evidence. Judges also work closely with the procuratorate and even environmental protection bureaus during the investigation portion of cases, revealing a team-like relationship between these three pillars of the legal system (Yang Su & Xin He, 2010 in Stern, 2014).

While such camaraderie and the overall legal structure itself seem to place the defendant at a disadvantage, the one area judges can assert independence is through sentencing. Criminal laws tend to provide a range of punishment for a given violation. This allows judges to be lenient and somewhat offsets the existing bias against the poor (Liebman, 2014; Stern, 2014; van Rooij, 2006). The cases collected for this study suggest that defendants who express remorse through sincere statements of regret (and willingly confessed to the crime) were likely to receive sentences closer to the minimum penalty associated with their crime.

Procuratorate System

The procuratorate is the prosecuting agency within China's legal system. It too follows a hierarchy that is in direct parallel with the courts described above. The Supreme People's Procuratorate supervises the procuratorates at the provincial and municipal levels, and directly answers to the National People's Congress and Standing Committee (NPC, 2014). The general powers of the procuratorates are to determine who should be arrested and which cases should proceed to trial. The procuratorate can perform their own investigation by interviewing suspects directly. More commonly investigations are performed by local police who then seek approval from the procuratorate to arrest the suspect(s). Specifically for environmental cases, the environmental protection bureau (the local branch of environmental regulation) submits evidence from their preliminary investigation with a request to the procuratorate for the case to be transferred to the courts. The procuratorate can deny a case and usually does so when the evidence is deemed to be not strong enough to secure a conviction (McConville, 2011). Only when "there is political pressure to prosecute," would the procuratorate take a case they are not confident about to trial (McConville, 2011: 190). These politically influence decisions likely occur during crackdown periods on a particular form of crime (e.g. last few years targeting of government corruption and the Bo Xi Lai case).

Public Security System

The final pillar of the legal system covers the various ministries, departments and bureaus² that comprise China's law enforcement. The Ministry of Public Security (MPS) is the

² All of these answer to the State Council, the central administration headed by the Premier (Congressional-Executive Commission on China, 2014).

primary authority that deals with criminal matters and maintaining the peace and security of the country. This ministry supervises the prevention and suppression of crimes. For the latter, the MPS issues temporary crackdown campaigns that unleash harsh and concentrated strikes against a certain area of crime. These campaigns have been waged against corruption, environmental crimes, terrorism, and, most recently, vices (i.e. prostitution, gambling and drugs) (Wong, 2014). The MPS also organizes security detail for major events or specific dignitaries. It also takes charge of identification records (e.g. identification cards and household registration) (MPS, 2007).

Under this ministerial authority is the Provincial Public Security Department, which handles the implementation of the aforementioned duties at the local level. As a general security agency, its mission to maintain social stability and order casts a broad scope to its duties including dealing with international entities, such as Interpol, Special Administrative Regions³ and envoys from Taiwan ("Agency Functions," 2010). Alongside this department are numerous others that focus on a particular area related to security or criminal matters (e.g. penitentiary administration, civil aviation or forestry departments) (MPS, 2007; 2005). Though the forestry department falls under the MPS, the overall environmental regulation is handled under a different ministry—the Ministry of Environmental Protection (MEP). The overlap between these two departments that may occur for a deforestation case can often lead to a delay in legal processes due to one department waiting for the other to complete a task before moving forward with its own procedures (GO1, 2014).

³ Special administrative regions (S.A.R.) refer to Hong Kong and Macau due to the overall high degree of autonomy they enjoy under China post-handover. This greater independence is due to the colonial pasts of both cities and China agreeing to a “one country, two systems” deal where each city continues to use their existing capitalist economic and political structures. Their circumstances are different from the autonomous regions of Xinjiang, Inner Mongolia, Ningxia, Guangxi, and Tibet, which have local governments similar to ones in China’s provinces, but with more legislative rights.

Ministry of Environmental Protection

Initially known as the State Environmental Protection Administration (SEPA), the primary administrative authority for regulating behavior that impacts the environment became the MEP in 2008. As part of the overall move by China to more seriously address its environmental issues, the restructuring of SEPA into the MEP increased its authoritative power and granted it greater involvement in policy-making (Yang, 2010). The MEP develops and oversees the implementation of all national laws and regulations concerning protecting the environment (MEP, 2007). For situations that may require a specialized expertise, coordinated efforts may be done between the MEP and other ministries such as the Ministry of Water Resources and the Ministry of Land and Resources. Corresponding to the hierarchal organization of both the courts and procuratorate, the MEP has offices at the city, provincial and regional levels known as environmental protection bureaus (EPB). These bureaus conduct day to day monitoring of pollution through inspections for registered corporations in their jurisdictional area (e.g. the city of Wuxi) and measuring the levels of pollutants in the air, water, and soil.

Catching violations that could be considered criminal are more difficult due to local protectionism (Tang, 2014; 2012; Wang, 2007; Beyer, 2006; van Rooij, 2006). For crimes in general, the police are reliant on the public notifying them of a given transgression (McConville, 2011). Identifying environmental crimes are generally under the purview of the EPB, with the police only being involved for supplementary investigations. With exception of large incidents that draw media attention, day to day harms committed against the environment are often not caught by officials. Companies receive warnings before an inspection allowing them time to ensure operations are compliant during the inspection (Tang, 2014; van Rooij, 2006). The

general public may not be aware that legal remedies exist for the deterioration in ecological quality caused by polluting enterprises (van Rooij, 2006). This explains how prior to an official crackdown on environmental crimes the majority of violations handled by the legal system were purely administrative (e.g. failure to submit an environmental impact assessment before commencing construction or operation) (IPE, 2010).

Strike Hard Campaigns

As previously mentioned, strike hard campaigns are initiated by the Ministry of Public Security. Strike hard campaigns are focused attacks against a specific form of crime for a temporary period. The heightened attention by official authorities to a certain type of deviance inevitably leads to more arrests. Political pressure for results during such a campaign motivates the procuratorate to pursue prosecutions that normally would have been dismissed. The “wave of convictions and severe penalties” during this time offers an impressive show of curtailing crime, but has little long-term impact (Cheng & Ma, 2009: 176; van Rooij, Fryxell, Lo & Wang, 2012; Yu, 2008). As soon as the campaign ends, law enforcement moves on to another area of crime leading to an inconsistent application of enforcement. Instead of being generally deterred from engaging in crime, potential perpetrators may learn to commit their deviant acts in between campaigns.

In 2011, a strike hard campaign was issued against environmental crimes. Close cooperation was orchestrated between the national task force and various local departments to monitor and close down thousands of industrial sites. The first stage directed the attack against lead acid battery enterprises. Among such companies, some were banned, while others had their operations suspended until they were in compliance with regulations. The focus was then

expanded to where environmental authorities conducted thorough checks on the types of pollutants emitted as well as the type of industries that heavily pollute. Monitors were most interested in the “discharge [of] heavy metal pollutants” (MEP, 2012: 1). After identifying the large number of enterprises⁴ responsible for such toxic emissions, the MEP severely restricted access to natural resources for construction projects involving the use of heavy metals. This meant these projects could not be located within a certain distance of a water source and that any released waste was closely and strictly monitored.

The expected rise in prosecutions was reflected in statistics released by the Jiangsu courts regarding the number and percentage of environmental criminal cases seen from January 2011 to December 2013. Prior to 2011, the total number of environmental criminal cases brought before the court was usually less than six (Wang & Gao, 2010). By the end of 2013, out of 68,840 criminal cases heard, 176 involved a crime against environmental protection, which was up 30.37% from the previous year (Jiangsu Province Higher People’s Court, 2014). The statistics do not breakdown the types of environmental crimes, which besides the transfer and discharge of toxic waste can also include the smuggling of endangered species, deforestation, unlicensed mining, etc. The following section details the history of how China’s environmental criminal law evolved from a vague acknowledgment of protection to a comprehensive breakdown of acts and harms impacting the environment.

Evolution of China's environmental (criminal) law

⁴ Out of “12,137 enterprises that discharge heavy metals” inspected, 1962 were lead battery businesses, 3470 directly handled heavy or non-ferrous metals through mining or smelting, 241 processed chemicals, 583 produced leather goods, 3636 were electroplating companies and 152 were treatment plants for waste disposal (MEP, 2012: 1). The remaining 2093 companies were not identified by type of industry in the report.

China has benefited from the Western experience in formulating its environmental regulatory system. The initial legal concept of protecting the environment came after a Chinese delegation attended the 1978 Intergovernmental Conference on Environmental Education in Paris. Following this, China added the environment as a protected entity to its Constitution (Wang, 2007; van Rooij, 2006). As the predecessor to SEPA and MEP, China had formed administrative agency the Environmental Protection Leadership Group in the 1980s, which set general guidelines regarding acceptable types and amounts of pollutants (Alford & Liebman 2001; Ross & Silk 1985).

This initial move was reminiscent of the tepid regulation in Western nations when the environmental impact of industrial operations and development were not fully understood. The proximity of the EDTZs to bodies of water, especially the six ports along the Yangtze River, may have been ideal for imports and exports, but it quickly laid waste to the natural resources there. With these SEZs implementing policies to keep costs low for corporations and local governments being told to keep increasing their province's GDP, any regulation on the pollutants dumped by factories was at the bare minimum (Navarro & Autry, 2011; Wang, 2007). Even if authorities were inclined to police these emissions, standards of environmental violations were vague at this time (Wang, 2007). Furthermore, this study's interview with Expert 2 revealed that during this period it was rather common practice for companies to make "under the table" deals with officials to look the other way.

During this period, China promulgated various pollution-specific laws such as the Marine Environmental Protection Law, the Grasslands Law, and the Air Pollution Prevention and Control Law to provide a general framework of acceptable levels of pollutants. No specific criminal laws, however, were added to the penal code to provide courts guidance on how to

punish offenders. Unlike the United States where the Environmental Protection Agency determines whether to refer a case to the federal court system, the decision lies with the People's Procuratorate of the respective province where the environmental crime occurred.

In the absence of specific penal law, courts applied criminal codes of existing articles regarding the endangerment of public safety: “sabotaging the socialist economy, violating property [and] social order [as well as] negligence” (Zou & Zhang, 1993: 278). Two specific articles were typically used: Article 115 and Article 187.

Article 115 If anyone violates the regulations on the control of explosive, inflammable, radioactive, poisonous, or corrosive materials and thereby causes a serious accident during the production, storage, transportation or use of those materials, and serious consequences result, he shall be sentenced to fixed term imprisonment of not more than three years or criminal detention. If the consequences are especially serious he shall be sentenced to fixed-term imprisonment of not less than three years and not more than seven years.

Article 187 Any state functionary who, because of neglect of duty, causes public property or the interests of the state and the people to suffer heavy losses shall be sentenced to fixed-term imprisonment of not more than five years or criminal detention.

Since Article 187 could only be applied to defendants who held a governmental or political position, Article 115 tended to be the main one applied in the few environmental cases that came before the court (Zou & Zhang, 1993). Though Article 115 is now considered a possible capital

offense if the harm is serious enough, in the 1980s the penalty did not exceed seven years. Given that these cases concerned violations of administrative based laws, like the Water Pollution Prevention and Control Law, judges seemed hesitant to lay down a particularly harsh sentence. Similar to the early years of Western nations' environmental regulation, environmental criminal cases in China typically resulted in a fine and, at most, a few months imprisonment (Zou & Zhang, 1993).

In general, local environmental protection departments tended to only issue warnings (Alford & Liebman, 2001; Ross & Silk, 1985). This anemic response by authorities was primarily due to a greater prioritization of economic growth where local governments were evaluated on the GDP they achieved (Navarro & Autry, 2011). Overall, the initial form of China's environmental regulatory system was rather superficial due to minimal consequences and a lack of enforcement (Wang, 2007; Alford & Liebman, 2001). Revisions in the 1990s and the formation of the State Environmental Protection Agency (which became the Ministry of Environmental Protection in 2008), represented an attempt to specify existing environmental laws, but still had little impact on corporate compliance (Wang, 2007).

In the mid-2000s, environmental regulation was bolstered through various initiatives. At the administrative level, China implemented the Environmental Information Act, which mandated that companies disclose their offenses and type of toxic emissions to the public. The goal of such admissions was to increase corporate accountability. Civil litigation was also expanded by allowing groups to represent individual residents aiding with the issue of cost when suing a corporation (van Rooij, 2010). Additionally, the criminal code was revised to include laws specific to "crimes of impairing the protection of environment and resources" (CECC, 2011). This new section consisted of nine articles, ranging from illegal dumping to the killing of

endangered species. Articles 338-339 specifically pertain to the illicit polluting behaviors of corporations:

Article 338 Whoever, in violation of the regulations of the State, discharges, dumps or treats radioactive waste, waste containing pathogen of infectious diseases, toxic substances or other hazardous waste on the land or in the water bodies or the atmosphere, thus causing a major environmental pollution accident which leads to the serious consequences of heavy losses of public or private property or human casualties, shall be sentenced to fixed-term imprisonment of not more than three years or criminal detention and shall also, or shall only, be fined; if the consequences are especially serious, he shall be sentenced to fixed-term imprisonment of not less than three years but not more than seven years and shall also be fined.

Article 339 Whoever, in violation of the regulations of the State, has solid waste from abroad dumped, piled up, or treated within the territory of China shall be sentenced to fixed-term imprisonment of not more than five years or criminal detention and shall also be fined; if a major environmental pollution accident is caused, which leads to heavy losses of public or private property or serious harm to human health, he shall be sentenced to fixed-term imprisonment of not less than five years but not more than 10 years and shall also be fined; if the consequences are especially serious, he shall be sentenced to fixed-term imprisonment of not less than 10 years and shall also be fined.

Though this charge of “causing serious environmental harm” is now typically applied in environmental crime cases, the 2009 Hu Wen Biao case shows that Article 115, the crime of endangering public security, is still being imposed by courts. In 2001, this article was revised to include a far harsher punishment for this offense:

Article 115 Whoever commits arson, breaches a dike, causes explosion, spreads poison or inflicts serious injury or death on people or causes heavy losses of public or private property by other dangerous means, shall be sentenced to fixed-term imprisonment of not less than 10 years, life imprisonment or death.

Whoever negligently commits the crime mentioned in the preceding paragraph shall be sentenced to fixed-term imprisonment of not less than three years but not more than seven years; if the circumstances are minor, he shall be sentenced to fixed-term imprisonment of not more than three years or criminal detention.

The expansion of criminal law for environmental crime and increased severity of associated criminal sanctions was meant as a clear indication of China's commitment to address its serious environmental issues. Additionally, China introduced a law at the provincial level that specifically captured one of the devious methods corporations would use to purge their industrial discharge: hiring external trucking companies to eliminate their waste off the books. Announced in the 2009 legislative report, “Regulations of Jiangsu Province on Prevention and Control of Environmental Pollution Caused by Solid Waste,” the law is stated below:

Article 28 The unit producing hazardous waste shall establish the hazardous waste production account system to truthfully record the information such as the name, varieties, time, quantity and destination of the hazardous waste produced, and shall keep the information for not less than 5 years. Where the unit producing hazardous waste terminates its operation, it shall send the hazardous waste account to the local competent environmental protection administrative department for keeping.

This particular law was in response to a scandal, where seven different chemical enterprises had hired a trucking company to dispose of their untreated waste into the river a good distance away from their plants. That direct response in policy-making exemplifies the power of the Ministry of Environmental Protection to design and develop laws/regulations to maintain the vitality of the environment and society in general. The latter motivation has begun to be more explicitly incorporated in policy reports released by the environmental protection bureaus. In line with the 11th and 12th five year plans announced, local EPBs have conducted self-evaluations and commenced agendas to improve their overall infrastructure and programs. Among these plans, the EPBs in Jiangsu (at least) have outlined steps to beautify the city and lay the foundation for a green society. As part of this plan, the administrative infrastructure has been undergoing constant improvement, to bolster its capacity to regulate (MEP, 2012).

Consultation meetings have been held between government officials, business leaders, NGO representatives, and scholars to identify areas for enhancement and effective regulatory measures. With reforms happening at all areas of the legal system, criminal, administrative, and civil, it appears that China is undertaking comprehensive development for its environmental regulation. The question is what is the model of regulation China is basing its system on?

Western nations have followed a general trajectory of a cooperative model to a punitive one and finally to an adaptive form that incorporated the two, known as responsive regulation (Ayres & Braithwaite, 1992). There are hints that China may be traversing this same path and is currently in the retributive stage. But with China's unique cultural history, could there be some deviation?

CHAPTER THREE

Methodology

This study was exploratory, seeking to capture how the Chinese government conceptualizes a form of crime not encountered prior to the industrialization period: corporate environmental crime. Initially considered an inevitable consequence of advancement, legal responses to corporate pollution were primarily administrative fines and civil lawsuits (Wang, 2007; van Rooij, 2006). Coupled with China granting researchers more access to official data in the 2000s, studies concerning corporate environmental crime have generally highlighted how the legal system has responded through civil law (Stern, 2014; 2011; van Rooij, 2010; 2006). Though criminal cases are on the rise, the data was still tentative and prevented an adequate sample number for a quantitative analysis at this point of time¹. Under this constraint, a qualitative method was chosen.

Given that the concepts of corporate criminality and environmental crime have until now been primarily steeped in the Western context, the form of inductive, grounded theory as initially conceived by Glaser (1978) could not be used for this study. Instead, an informed grounded theory approach was applied. This is a form of constructivist grounded theory in that it recognizes a project is undertaken with existing theoretical knowledge instead of the “empty head” Glaser insists upon (Thornberg, 2012). Using an informed grounded theoretical method involved reviewing theory and literature throughout the research process. This produces greater

¹ There was a rise in criminal prosecutions for environmental crimes according to justice statistics spanning from February 2011 to December 2013 that were released by the Jiangsu courts. At the time of this writing, most court judgments are being withheld as they continue to update the websites. In the future, researchers will likely be able to have a more substantial number of cases for analysis.

sensitivity to the data, by having another well to sample from when cycling between theoretical sampling and construction (Thornberg, 2012; Mills, Bonner & Francis, 2008; Charmaz, 2006).

The multiple iterations of the informed grounded theoretical research process probed more deeply into how China's legal system is developing its understanding of environmental crime. Focusing on the intersection environmental crime has with white-collar and corporate crime, this investigation inquired about environmental crimes perpetrated by companies. With existing tension between the competing goals of preserving the environment and modernizing the nation, regulating corporate violators presented a complex situation for the Chinese government. The selected qualitative methodology allowed for a nuanced examination of the regulatory responses employed and discussed in China.

The specific qualitative methods used involved a content analysis of court judgments, legislative documents, and news media supplemented with in-depth interviews of professionals knowledgeable about China's environmental issues. For the purposes of this study, criminal cases were limited to only those involving toxic waste smuggling and water pollution/contamination. This choice was due to toxins dumped in the water being more easily linked to a company's actions (or inactions) than air and soil contamination. Among the cases collected, the act of bribery was also included when it was specified to have led to incidences of illicit water pollution. In one special case, the act of illegal mining was also included in the analysis as the judgment noted the act had greatly and negatively impacted the ecosystem and water quality of the Yangtze River.

Due to both interview responses and the collected documents being coded together in the analysis, the methodological procedures for the content analysis are grouped by the following two categories: data collection and analysis. In the section concerning data collection, the

processes of how documents were procured, participants were recruited and interviews conducted are described. The section regarding analysis details the full coding process used.

Data Collection

Content Analysis

Conducting a content analysis provided for the ability to explore the interpretations represented in the manifest and latent content² of legislative, regulatory and court documents (Maxfield & Babbie, 2011; Zhang & Wildemuth, 2009). Analytical units were broken down by words or phrases. Relying on archival documents, there was the possibility that the documents were edited to obscure the reality. In an attempt to combat this validity concern both the Chinese and English versions issued by the Chinese government departments and its courts were examined. For documents written in Chinese, a given word or phrase varied from one to four characters.

Location/Access

Documents for the content analysis were taken from Jiangsu province during the period of 2008 through 2013. Jiangsu was of particular interest in achieving a better understanding of China's trend to handling environmental crimes more punitively, as one of its provincial courts was the first to impose the harshest penalty for an environmental crime (Li, 2009). The open door economic policy was applied to the province through the formation of two Economic Technological Development zones (Liu & Wu, 2011). These zones offered large tax breaks to encourage foreign investment, and subsequently became sites of numerous economically-

² Manifest content refers to the surface text and focuses on the denotative meanings of the language. Conversely, latent content is the hidden, underlying meaning to texts, which can be interpreted from the contextual patterns, the tone and the connotative meanings of certain words/phrases.

motivated crimes, including environmental crimes (Liu & Wu, 2011; Gopalakrishnan, 2007; Wong, 1987). Jiangsu contains one of the main ministry regional offices for enforcement of environmental protection. It is also one of the first provinces to implement a specialty environmental court, and has the greatest number of specialty environmental courts with a total of three (Wang & Gao, 2010; Lin, Wang, Chen, Camacho & Lin, 2009). Moreover, the coastal province has been the site of a number of publicized protests against polluting enterprises. Brettell (2003) found that Jiangsu topped the list in number of environmental harm complaints issued by the public. Given this activity, it appeared to be a good location to probe the extent these various elements may have influenced environmental policy and prosecution.

Court Judgments

In terms of generalizability, China's legal system is still mostly fashioned on a “rule by law” basis, where there is minimal judicial autonomy in interpreting the laws set by the National Standing Committee (Feldman, 2005; Potter, 1999; Woo, 1999). This means that the decisions by a local court can be considered representative of the national perspective on a given crime. These cases were accessed through online sources. Contacts from the Nanjing Court relayed that the province of Jiangsu was actively uploading publicly-available judgments online. In the initial months of fieldwork, the website was not accessible, and so the following databases were also searched: Lexis Nexis China, Chinalawinfo, and Peking University Law (pkulaw.cn). Chinalawinfo provided two guiding interpretations from the Supreme People’s Court regarding “criminal cases involving environmental pollution,” as well as three review papers discussing environmental cases that should be used as a model for lower court decisions. The national court database located at Chinacourt.org was also accessed. Regular checking of the official Jiangsu

court website, <http://www.jsfy.gov.cn/> ultimately bore fruit. The official Jiangsu court website includes cases from all levels of courts around the province (i.e. basic [county level] to intermediate [prefecture level] and higher people's [provincial level]). From all these sources, the total available cases related to pollution from Jiangsu were just over 200 during the 2008-2013 period. The majority of these cases, despite being classified under the criminal case category, turned out to be a civil case between two parties. Sifting through these cases resulted in 16 criminal prosecutions concerning a criminal act that resulted in environmental harm between 2008 and 2013 (see Appendix 1 for a table summarizing each case). The latest case listed was decided in January of 2014, but the acts under contention occurred in 2013 from July 7th to July 12th.

Legislative/Policy Documents

Legislative and policy documents were much easier to procure. All environmentally-related documents were collected and analyzed to gather the full context of this area of China's legal system. The content ranged from press releases concerning programs to improve the regulatory infrastructure (e.g. communication between departments, enterprises, and the public), inspection schedules and notices, procedural guidelines, and legislation from the provincial government. Copies of environmental regulatory documents/press releases were given during meetings with various contacts and potential interviewees. Further documents were available from the official websites for each of the local environmental protection bureaus (e.g. Chongqing, Nanjing, and Wuxi). Additionally, the Chinalawinfo database had an extensive collection of policy documents, including official issuances of regulations and procedures related to environmental protection.

Keywords

The following keywords were used to search for environmentally-related criminal cases and policy documents: 污染 wu1 ran3 (pollution/contamination), 环境 huan2 jing4 (environment), 环保 huan2 bao3 (environmental protection), 废物 fei4 wu4 (waste), and 水 shui3 (water). For databases that were not already organized by case category (i.e. criminal, civil, or administrative), 刑事犯罪 xing2 shi4 fan4 zui4 (criminal offense), 刑事案件 xing2 shi4 an4 jian4 (criminal case) and 刑法 xing2 fa3 (criminal law) were used. With exception of the official Jiangsu court website, 江苏 Jiangsu was also used as a keyword.

In-depth Interviews

Interviews were conducted to more directly access the opinions of those determining and implementing environmental crime laws. Knowing the challenges in recruiting participants from China for face-to-face interviews, this portion of the methodology was supplemental to the content analysis.

Participant Population

To gain a variety of perspectives, three categories of professionals were sought: 1) government officials, 2) legal actors, and 3) experts. “Government officials” included those working for the Ministry of Environmental Protection (MEP), the regional Eastern office located in Nanjing, or one of the local Environmental Protection Bureaus (EPB) around Jiangsu province. “Legal actors” referred to any lawyer, judge or other person associated with the

court/procuratorate³ who had worked on an environmental case in the past. The “experts” category alluded to professionals whose work had focused on environmental issues in China. Examples of such experts include scholars, reporters, or activists. This category was included due to the government holding consulting sessions with professionals knowledgeable about the country’s environmental problems before issuing any new environmental-related policy (Finamore, et al., 2013). This study aimed to recruit approximately 10 participants per category, resulting in a maximum total of 30 individuals. The expectation was that 3-4 individuals per category would be able to be successfully recruited, mainly due to the difficulty presented by need to rely on kinship networks to meet with potential interviewees. The section on the recruitment method describes this in greater detail.

Recruitment

A snowball sampling technique was used to recruit participants. Within the Chinese culture, kinship networks are greatly emphasized. Therefore, while recruiting, it was paramount to be introduced to potential participants by an individual known to them. Initial participants were identified through referrals from academic and personal contacts. None of the contacts used were engaged in the research project. Their only role was to facilitate introductions to potential participants.

Introductions and explanations occurred both over email and in person. The email and in-person script used for explaining the study are included in Appendix 2. When describing the study to the potential participants, a study information sheet was provided for further clarification on their rights and role if they were to participate in the study (See Appendix 3A

³ The procuratorate is the prosecuting office in China. It is structured in a parallel hierarchy to that of the people’s court system (China’s Judiciary 2012).

and 3B for English and Chinese versions, respectively). When given the study information sheet, potential participants were assured that they were free to say no, and that they did not have to decide immediately. They were also encouraged to ask any questions about the study before they decided. For those who agreed, they were asked at the end of the interview if they could refer any other person for an interview. In the recruitment process, no potential participant directly refused. Rather, there were potential participants who never responded to their emails, and so, their lack of response was taken as non-consent.

Response Rate

With the aid of contacts 27 potential participants were approached: 9 for the expert category, 8 for legal actors, and 5 government officials. For the remaining five, contact information was found for the local procuratorate office in Fuzhou, Jiangsu and for four reporters. Emails were sent to them directly, but received no response. For the 22 individuals that contacts introduced, 7 had agreed: 1 government official, 2 legal actors and 4 experts. From these seven, five were interviewed (the four under the expert category and one under the government official category). Two legal actors affirmed their willingness to participate through a mutual contact; however, those interviews never came to fruition. Thus, the response rate was 5 out of 27, or approximately 18.5%.

Though this sample was small, it fit expectations and was considered acceptable for the purposes of this project. The interviews were conceived as supplementary to the content analysis of archival data due to aforementioned difficulties of accessing potential participants. It is also the nature of qualitative, in-depth interviews to have smaller sample sizes given that respondents are not anonymous to the respective researcher and the interview itself is time consuming.

Interview Design

The interviews were semi-structured, in-person⁴, and lasted between 45 to 60 minutes. The semi-structured question format provided flexibility to probe motivations and interpretations through the course of the interview. This further increased the likelihood of the responses being closer to the respondents' real views and thus, increased the validity of their replies. The structured aspect of the interview was represented by the same base questions used for all the interviews, and permitted comparison between participants. The reduced rigidity of conducting semi-structured interviews allowed participants to speak more naturally. Some of them preferred to informally chat and convey a couple of stories, before commencing the official interview. Though there was a slight scripted nature to those accounts, it did help build some camaraderie with those participants and aided with later inquiries about certain details of those stories.

Before beginning the interview, participants were once again assured that their responses would not be associated with their names or any personal identifier. Direct quotes are accompanied by a categorical group and a number, such as "Expert 1". Participants were also reminded that they could refuse to answer any question, and could stop the interview at any time. Participants were also asked if they would consent to the interview being recorded; none acquiesced.

Locations of the interviews were selected by the participants, ensuring their needs were met and that they were as comfortable as possible. Interviews were conducted in both English

⁴ One respondent, who was unable to meet in person, elected to answer questions over email. They also consented to answering follow-up questions by email. The only deficit in this interview compared to the others was that non-verbal gestures/cues could not be observed during the interview. Given the nature of the topic, those non-verbal aspects were not particularly important to the ultimate analysis. Thus, those responses could be compared to the others and coded.

and Mandarin, depending on the participant. Dialects vary across the mainland, and the Nanjing dialect spoken in Jiangsu province is particularly unique. In light of this, it was noted to the participants that they may bring an interpreter of their choice to aid with translations during the interview. This option was taken in two of the interviews.

Interviews began with general questions about their job and how they came to be involved with environmental issues in China, such as: What interested you about working on environmental regulation policy? This was done to gain a sense of their experience with environmental issues in China. All participants were asked how they defined environmental crime to capture their general perception of the concept. The primary question topics for the interviews covered three areas: 1) questions about perpetrators of environmental crime, and corporations in general; 2) questions about the form and extent of harm caused by illegal dumping; 3) questions about enforcement approach. All of the questions were concerned with the respondents' perceptions of these subjects. As there were three different participant groups (government officials, legal actors and experts), the questions were worded slightly differently for each category. See Appendix 4 for the respective question lists.

At the conclusion of the interview, participants were thanked for their time and responses. They were also asked if they were willing to refer anyone who was knowledgeable about environmental issues in China. Additionally, a few of the participants interviewed voluntarily provided documents (i.e. information pamphlets, press releases, and news articles) relevant for the study.

Analysis

The archival documents collected for the content analysis and the interview transcripts were coded for analysis. This began with open coding where the data was closely read numerous times and tentatively grouped by categories that emerged from repeated and emphatic phrases. Open coding was performed as data was collected, leading to most of the archival documents being coded before the interviews were conducted and transcribed. Thus, the following subsections separate the initial coding process descriptions for documents and interviews. The first subsection describes the beginning analysis stage when only the documents underwent open coding. The second subsection details the full coding progression of analysis. Beginning with a brief description of how the interview responses were integrated with the archival data, this section then discusses the next stage of analysis performed. This stage involved axiom coding which entails making connections between the categories that had emerged in the open coding stage. These axiom codes, in turn, revealed the overall theme to this project's argument.

Initial Coding

During the initial steps of coding, the primary focus was on the manifest content of the documents. This was due to them being official documents, which enforced a professional and uniform tone. The units for analysis were words/phrases, which in the Chinese language can vary between one to four characters.

Open coding was first used to see which words were repeated the most, and how illegal pollution, wu1ran3 污染, and the environment, huan2jing4 环境, were represented. The rhetoric for these two phrases revealed an interesting contrast. Discussions of wu1ran3 was used in concrete, physical descriptions of harm, demonstrating the negotiations in the legislature and the Supreme People's Court on how to legally define unacceptable forms and limits of discharged

materials into the environment. Meanwhile, references to huan2jing4 detailed the social harms associated with illicit pollution. This was informed by the abstract nature of the documents' references to the environment. Not only was the environment labeled as an entity to be protected, but society's interactions with it were highlighted. Such commentary presented a more future-oriented view of the negative impacts environmental crimes can have for the country, and also noted the responsibility society has to care for the environment and ensure the vitality of subsequent generations.

The other words that appeared the most frequently among the archival documents (shown in the tables below) rounded out these two views of harm caused by environmental crime. The institutional source of the document (i.e. local Jiangsu courts, SPC or Jiangsu legislature) appeared to differentiate on the primary focus of the type and extent of harm of an environmental crime. Through the use of qualitative data analysis software, word frequency counts were conducted on the following document types: local court judgments, the Supreme People's Court (SPC) interpretations/review papers, and provincial legislature reports/regulations.

There were ten phrases that dominated the 16 local court judgments:

Table 2.1

Most frequent words in criminal case judgments from Jiangsu courts

Chinese Word/Pronunciation	English meanings
环境 / huan2jing4	Environment
公司 / gong1si1	Business company/corporation
污染 / wu1ran3	Pollution, contamination
保护 / bao3hu4	Protection

环境保护 / huan2jing4bao3hu4	Environmental Protection
被告 / bei4gao4	Defendant
责任 / ze2ren4	Duty, obligation, responsibility, commitment, blame/liability, trust, job
行为 / xing2wei2	Action/Behavior/Conduct
裁判 / cai2pan4	Judgment
国 / guo2	Country

Both the phrases for protection and environmental protection were noted for further analysis due to the former being used in the context of protecting people, society, and the future. Though these areas of protection are complimentary, this was an important distinction in the legal rhetoric that informed later coding cycles of the analysis.

These are the top ten phrases within the interpretations and review documents issued by the Supreme People's Court:

Table 2.2.

Most frequent words in documents issued by Supreme People's Court

Chinese Word/Pronunciation	English meanings
以上 / yi3shang4	That level or higher
致使 / zhi4shi3	To cause/result in
污染 / wu1ran3	Pollution
规定 / gui1ding4	Provision, rule, to fix
环境 / huan2jing4	Environment
或者 / huo4zhe3	Possibly

严重 / yan2zhong4	Grave, serious, severe, critical
排放 / pai2fang4	Emission, discharge
犯罪 / fan4zui4	Crime
国 / guo2	Country

The list of most frequent phrases from the legislative documents was skewed due to the uniform template they all followed. That resulted in the most frequent terms being part of the numbering system used. These were not included in the analysis. The following four terms were the next most frequent:

Table 2.3

Most frequent words from local legislation in Jiangsu Province

Chinese Word/Pronunciation	English meanings
事件 / shi4jian4	Incident
应急 / ying4ji2	Emergency , to respond to an emergency
应当 / ying1dang1	Should, ought to
报告 / bao4gao4	Report, to inform

As tables 2.1-2.3 show, the judgments issued by the local courts emphasize that defendants were not only responsible for the damage of their specific act, but have a duty to the country to help protect the environment. The SPC's interpretations share that same sentiment, but emphasize the need to clarify the legal standards on what constitutes a serious harm, representing the SPC's role as a guide for the local courts. Though the legislative documents did

set the physical standards of acceptable limits of pollution, as well as what damages and injuries constitute criminal sanctions, they particularly highlighted the requirement of issuing reports on polluting behavior. These reports were to be submitted by both the inspection agencies (i.e. local environmental protection bureau) and enterprises suggesting the government's attempt to increase transparency and overall communication between monitoring agencies and companies.

Coding Progression

After returning from each trip into mainland China, notes from the interviews were typed up. Though notes were written in both Mandarin and English during the interviews, the Mandarin comments were translated into English for the typed version. These notes were then coded and integrated with the content analysis of the collected archival documents.

Coding of the interview transcripts was initially separated for each of the three main research questions regarding defining environmental harm in the criminal context, the perception of corporations and enforcement styles. The word frequencies noted above certainly informed the categorical groupings used, and most interestingly hinted at different goals within the legal system on regulating environmental crime. As the coding progression table for question three shows, those different goals are represented through the use of more than one style of reproach for environmental regulation.

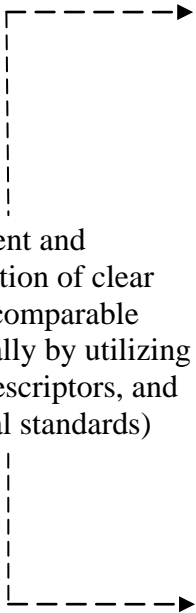
The examples column of each table is further separated by the type of data source when a document or interviewee provided unique details or examples. For space, the letter "I" is used to refer to interview responses, "J" is used for the court judgments and "P" for any policy/legislative document. As the coding progression tables display below, the data was first grouped by categories that answer the most basic properties of the research question. For

question 1, that was the representations of harm. This was broken down into overall definition of environmental crime, physical harms, social harms, and measurements of harm. Though measurements of harm mainly quantified damage done to physical items and properties, it was kept separate to emphasize its purpose in establishing clear standards to help law enforcement identify environmental crimes and hold perpetrators accountable. Social harm referred to consequences to the livelihood, security and harmony of society. This was generally represented by comments about disrupting social harmony, endangering the public’s health and was spoken about in a more futuristic perspective through consideration of the well-being of one’s grandchildren.

Table 3.1 Code Progression for Question 1

Question 1: What are the defining harms of an environmental crime, and how are such harms taken into consideration by the legal system?

Axiom Coding	Open Code	Examples from Data
Accountability } Responsibility }	Definitions of “environmental crime”	I: “acts of disobedience resulting in deterioration of environmental quality” – GO1 “whatever national regulations define as an environmental crime” –Expert 1 “rules and regulations for companies in China that vary on the richness of province” –Expert 2 “crime related to the environment and pollution” –Expert 3 “legal definition, [but particularly viewed to be the cause of] major industrial accidents” –Expert 4

<p>Establishment and communication of clear standards (comparable internationally by utilizing scientific descriptors, and international standards)</p> 		<p>J: “causing serious environmental pollution”⁵</p> <p>“endangering public security through the spread of poison”</p> <p>P: “causing serious environmental pollution”</p> <p>“endangering public security through the spread of poison”</p> <p>“failure to implement/maintain filtering equipment” and other administrative violations</p>
	<p>Physical forms of harm</p> <p>(Physical forms of harm)</p>	<p>I: fugitive emissions, lead or arsenic poisoning, chemical spills, explosions, water/air unsafe to ingest/breathe</p> <p>J: water sources turned dangerously acidic</p> <p>P: deaths, injuries (slight to serious), loss of public/private property, discharging untreated chemical waste (e.g. mercury, cadmium, arsenic, chromium, lead, cyanide, yellow phosphorus), pathogens or radioactive waste into rivers, lakes, drinking sources</p>
	<p>Measures used for harms (physical and social)</p>	<p>I: Air quality index, comparing average life spans to five years prior</p> <p>J: “pH values ≤ 2.0, are hazardous waste”, tonnage of toxic waste dumped; property damage of more than 300,000 yuan; destruction of geographic area of at least 20 sq m for any type of land, 10 sq m for farmland and 5 sq m for preserved lands; “chromium content of 8.28 mg/L, which greatly exceeds the</p>

⁵ Due to the original text of the judicial documents being written in Chinese, all quotes are from the translations.

Responsibility (future orientation)		<p>limit of 1.5 mg/L”</p> <p>P: ppm; pH; Grade I-III protection zones (determined by proximity to water source, based on WHO guidelines); at least one death or seriously injured</p>
	Social Harms	<p>I: Deterioration of quality of life (cannot safely breathe; access to safe drinking water is affected; crops/fish/livestock turned inedible from being poisoned); “pollution is very bad for young generation, we need to clean up for them”</p> <p>J: Endangering of public security and sustainability for future generations; disrupting social harmony</p> <p>P: endangering people’s health</p>

Key

→ Main theme of responsibility

- - - - - → Communication

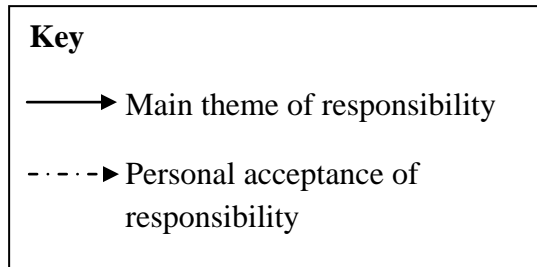
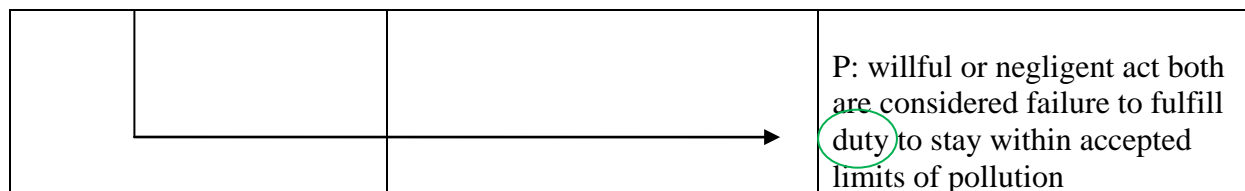
For question 2, the base categories were positive labels, negative labels and representations of guilt. Representations of guilt covered considerations of intent and perspectives on how culpable corporations can be. The interview responses brought up the problematic aspect of blamelessness from the fact all industrial operations release some amount

of pollutants. The view of responsibility to sustaining the future that appeared in question 1’s table offers an answer to that supposed obstacle to regulating corporations.

Table 3.2 Code Progression for Question 2

Question 2: How are corporations perceived in the context of illicit pollution? What is the role of intent in determining a corporation’s guilt of its illicit pollution?

Axiom Coding	Open Code	Examples from Data
<p data-bbox="188 1297 375 1329">Responsibility</p>	<p data-bbox="561 709 751 741">Positive labels</p>	<p data-bbox="992 709 1344 814">Partners in infrastructure; investors; contributors to economic growth;</p>
	<p data-bbox="561 903 764 934">Negative labels</p>	<p data-bbox="992 903 1406 1155">I: often corrupt; flouting the law; disobedient “...main polluters in China. State of environment largely relies on environmental performance of these polluters” --Expert 3</p> <p data-bbox="992 1197 1279 1266">J: thoughtless; selfish; disregarded duty</p> <p data-bbox="992 1302 1406 1339">P: failed to fulfill duty; violator</p>
	<p data-bbox="561 1377 878 1409">Representations of Guilt</p> <div data-bbox="581 1608 857 1682" style="border: 1px solid black; padding: 2px; width: fit-content; margin: 10px auto;"> <p data-bbox="594 1612 844 1671">Acceptance and ownership of responsibility</p> </div>	<p data-bbox="992 1377 1393 1560">I: somewhat blameless due to pollution being inevitable consequence/necessary evil of industry; incidents often due to negligence</p> <p data-bbox="992 1598 1406 1883">J: statements of remorse leads to more leniency; comments on lack of awareness of the act being illegal not considered mitigating factor; accused are specific individuals in charge of the defective equipment that led to illicit pollution</p>



Question 3 specifically covers different regulatory styles that were depicted in the data. Early renditions used the following four categories of enforcement styles: cooperative, retributive, deterrent and combination. The latter two had too much overlap with cooperative and retributive styles weakening their contribution to developing a theoretical narrative and were thus, removed. Among the data, there were acts involving specifically administrative agencies and non-state actors that were not truly captured under the “cooperative” or “retributive” groups. This led to the remaining two regulatory-related categories being created. Under the “retributive” category, the harshness of criminal penalties was not presented as an end goal of the legal system’s response to environmental crime. Rather, it came across as a tool to be used in conjunction with other programs and procedures within China’s developing infrastructure for a “green society”.

Table 3.3 Code Progression for Question 3

Question 3: What are the characteristics of the enforcement utilized for regulating environmental crimes? How does this represent the country’s conception of environmental crime?

Axiom Coding	Open Code	Examples from Data
<p>Accountability</p> <p>Responsibility</p> <p>Increased Communication</p>	Administrative forms of regulation	<p>I: frequent inspections; use of specialty equipment to monitor online;</p> <p>J: listing accused company’s past history of ignoring violation notices</p> <p>P: mandated Environmental Impact Assessments; daily meter penalties assessed if company does not comply with necessary changes by the given deadline; suspension of operations/license for noncompliance (regardless of any criminal harm committed)</p>
	Cooperative form of regulation	<p>I: “need patience for development [in introducing/teaching new green practices] and having the rest of society follow” --GO1</p> <p>J: N/A</p> <p>P: participation in pledge programs; publishing name and shame lists of most polluting companies; conferences held between government and businesses leaders discussing ways to increase transparency of environmental regulation</p>
	Retributive form of regulation	<p>I: unsure on use of death penalty, which seems extreme; harsher penalties make a strong statement, but its implementation is still under question—lowered thresholds help with this but local politics may pose an obstacle</p> <p>J & P: prison sentences that are longer when resulting damage is more severe, plus fiscal penalties including the costs to clean up after the pollution incident</p>
	Non-state actors roles in regulation	<p>I: “NGOs being involved in legislative process more, e.g. they were consulted for Beijing Air Pollution Control Regulations” --Expert 3</p> <p>“NPC consulted public through website for</p>

<p>Increased Communication</p>	<p>-----></p>	<p>the 1st and 2nd drafts of amendment to environmental protection law” --Expert 3 complaint hotlines; education initiatives to increase awareness of environmental issues among public and corporations P: consultation periods with public; meetings with representatives from NGOs; educating public on green initiatives to build a basis for a “green society”</p>
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Key	
————>	Main theme of responsibility
----->	Accountability
----->	Communication

Once these codes were finalized, the data was coded for any connections between these categories. This led to the following axiom codes: establishing of clear standards, responsibility, increasing communication, and accountability. Though these identified links are only displayed in each individual table, they were analyzed in tandem to build the overall narrative emerging from the data.

The axiom codes of establishing clear standards, communication, and accountability all fed into the concept of responsibility. Promulgating boundaries for corporations to operate within provided an official basis of expected behavior. Increasing the clarity of these limits, as well as the comprehensiveness and dissemination of regulations aid companies in becoming aware of what they should or should not do. Furthermore, these axiom codes represent the government’s intention to reduce any confusion over environmentally-related regulation that

could be used by companies as a reason for noncompliance. The introduction of multiple forms of accountability further bolsters the legal system's ability to catch violators before the damage goes too far. For the times it does result in serious harm, the responses through criminal proceedings highlight the more abstract concepts of responsibility—providing a safe and healthy environment for future generations and help maintain the security and vitality of the country.

Through all three coding progressions, there was a strong link to the notion of duty and obligation: to fulfill all aspects of one's job, to follow the letter of the law (including maintaining the sustainability of the immediately surrounding environment) and to look out for the betterment of the group/society. This does flow from a communist and collectivist form of thinking, and creates an interesting tension with a corporate mentality that is steeped in much more individualistic thinking. Though, corporate criminals do share a group mentality in the sense that their actions are for the benefit of the company. In that regard, this is an aspect that China could successfully use to regulate companies.

The next three chapters will elaborate on each of the three coding progressions discussing how the overarching theme of responsibility/duty is informing how the Chinese government is structuring its environmental regulatory system.

CHAPTER FOUR

The Right Level of Harm: Determining what measures of pollution are criminal

Industrial revolutions go hand in hand with ecological deterioration. The sky turns dark as the air becomes laden with ash. Rivers turn to oil-slickened trails of death as fish rise to the discolored surface. These visceral scenarios are commonplace throughout China and are the extreme consequences of unfettered manufacturing. In its Post-reform era, the dragon nation has rushed to catch up with its developed, Western counterparts. Opening its borders to foreign investors and offering to be the “world’s factory floor” accelerated the country’s introduction to new, automated technologies but also its subsequent decline in environmental quality (Navarro 2008: 22).

Polluted land, air, and water have been a mainstay in China since the 1980s, but it was only in the mid-2000s when the government began to seriously address environmental protection. Likely influenced by widespread international criticism in the lead up to the Beijing-hosted 2008 Olympics, China implemented major revisions to its criminal code by adding an entire chapter specific to environmentally-related crimes. Labeled “crimes of impairing the protection of environment and resources,” these new laws detailed specifications of what was considered illicit pollution. The greater the harm caused by a given act, the greater the punishment applied. But what constitutes a criminally liable harm in China?

This chapter discusses the various forms, measures, and ideology behind China’s evolving definition of environmental harm in a criminal context. Starting with a brief history of the initial conceptions used by China, this chapter then delves into concepts of corporate violence, expressive retribution, conservation criminology, and corporate citizenship to embed

the analysis of “harm.” Content analyses of the collected judgments and legislative documents reveal a broader approach to both the physical and social harms considered by the Chinese government. Initial assessment of damages for an environmental crime would usually be limited to localized, short term costs, but would be embedded in a larger rhetoric of the impact the incident had on society as a whole. Drawing from the aforementioned concepts in criminological literature, this chapter argues that in defining harm within its regulation of corporate environmental crime, China is representing its obligation to the health of the global community. Moreover, China is compelling a sense of duty among corporations to operate in a responsible manner so as to ensure a sustainable future for the country and its people.

Initial conceptions

Early conceptions of environmental crime came about after observing the destructive consequences of new technologies in Western nations. Through environmental activism of grassroots groups, legislation was put forth in attempt to regulate corporations’ polluting behavior (White, 2010; Burns & Lynch, 2004; Clifford & Edwards, 1998; Hedman, 1991). Environmental crimes are only deemed criminal by being prohibited rather than any inherent sense that the act is wrong. This perspective reflects the general mindset of prioritizing advancement and development of the nation over preserving the ecosystem, as well as the prior fallacy that natural resources were limitless. As research on the hazards of chemical toxins entering the eco-system and human bodies was released (most famously with Rachel Carson’s book, *Silent Spring*), the threat became more real and began to seep into public consciousness. International conferences were held to further understand future ramifications of industrial expansion and discuss how to stave off additional destruction.

A Chinese delegation attended the 1978 Intergovernmental Conference on Environmental Education in Paris, and the year after the nation had officially recognized the environment as a protected entity in its Constitution (Wang, 2007; van Rooij, 2006). Despite this legal recognition, the sense of permanency to the ecological costs of industrial operations was not understood. The accumulated consequences of an industrial revolution had led Western nations to realize that legal protection was needed for the environment. But China was only beginning its struggle with balancing preservation and advancement. A rough guideline listing the types and amounts of acceptable pollutants was used in the 1980s by the Environmental Protection Leadership Group (the first administrative agency formed for environmental regulation), but rarely enforced (Ross & Silk, 1985; Alford & Liebman, 2001). Complaints by residents about the foul air and undrinkable water were typically ignored due to the then mantra of developing at any cost (Ross & Silk, 1985). During this period, companies operated with little concern of their environmental impact, and often took advantage of the lackadaisical enforcement.

This began to change as China issued pollution-specific laws, such as the 1999 Marine Environmental Protection Law. These laws still focused on administrative sanctions, but also allowed for civil litigations. Inclusion of acceptable behaviors in regards to releasing waste aided with claims against a person or company. At this point, the “harms” of environmental crime were defined in monetary form. Companies followed these laws in a rote manner, correlating their compliance with less financial loss and the ability to continue operating. Incidents that were prosecuted in criminal court were charged with laws regarding the endangerment of public safety, “sabotaging the socialist economy, violating property, [and] social order [as well as] negligence” (Zou & Zhang, 1993: 278). Sentences were minimal with forensic technology in investigations too rudimentary to fully implicate the corporate executive.

Additionally, any inspections conducted and fines levied at the time were “typically handled under the table” (Expert 2, 2014).

The 2007 revisions were a big step forward for environmental regulation. The nine articles added under the penal code’s new section, “Crimes of undermining protection of environmental resources,” provided a rather exhaustive list of deviant acts, consequential harms, and fixed imprisonment terms. The specificity of legal responses to a particular act reduced the arbitrariness in law. Still, the costs of an environmental crime were worded vaguely with phrases such as “heavy losses” and “grave consequences of personal deaths and injuries.” It was left to the Supreme People’s Court (SPC) to issue an interpretation¹ qualifying these descriptors into precise quantities. One death was deemed grave enough.

The SPC interpretation broke down the applicable harms further with the following: at least three seriously injured, at least 10 slightly injured, or a resulting scenario of at least one seriously injured person and at least five slightly injured. Widespread illness due to illegal waste exposing the public to infectious disease or poisoning was also included. The consideration of human casualties was not the only forms of harm clarified in the interpretation. The SPC also covered property damages of a monetary worth of at least 300,000 yuan or rendering 20 mu² of land unusable. Areas with a special designation such as “basic farmland or shelter forestland” had enhanced protections where the loss of 5 mu qualified as serious and criminally liable harm. This elucidation of the 2007 environmental laws was a significant step forward for environmental regulation by removing ambiguity and made them “more implementable” for law enforcement (Expert 3, 2014). For example, the interpretation specified the types of illegal substances that would result in “serious pollution and harm” (SPC, 2013; 2006). These

¹ Though the environmentally-related criminal laws were promulgated in 2007, they were first proposed and written in 2006, of which the SPC interpretation was also issued. An updated version was later released in 2013.

² mu references the measurement of a Chinese acre. The scale factor is 1 mu = 6.66 m², or 1 m² = .0015 mu.

prohibited chemicals include mercury, cadmium, arsenic, chromium, lead, cyanide, and yellow phosphorus. The SPC also provided enhancements for punishments, and expounded on procedural rules of evidence. For the latter, this meant that all monitoring data must be verified by the provincial or regional environmental protection bureau and that experts brought in to testify in a given trial must be selected by the Ministry of Environmental Protection. Most importantly, the low thresholds of what environmental harms qualified as criminal, theoretically, allowed, at least in theory, the legal system to arrest and prosecute more violators.

In addition to this interpretation, the National People's Congress still retained the death penalty as a possible sentence for environmental crimes. It is specifically associated with the charge of "endangering the public security," the same one Hu Wenbiao of the Biaoxin Chemical Co. was indicted with. In its written form, China's environmental law does consider the violence corporations can inflict on the populace. Yet, in practice, the legal response appears anemic, with defendants usually sentenced closer to the minimum range of years.

It is true that the harms from these crimes are mitigated by the degree of remorse exhibited by the defendant at trial. For example, Yang, the defendant in the 2013 "wash bucket case," turned himself in to local authorities after the bucket he used to dispose of the untreated waste was discovered by the environmental protection department. He was sentenced to only one year in prison and a 30,000 yuan fine, despite having committed the act intentionally. In the Haimen case, Ye Cheng repeatedly stated that he did not think the crime of dumping waste acid directly into the river would be "so serious." His lack of awareness on the consequences coupled with his lamenting that he "shouldn't have listened to [his] boss" were not enough to mitigate his crimes. Rather, the court was more swayed by the fact he had illegally poured the untreated chemicals on four separate occasions, totaling 32 tons, and that had he not been caught, he would

have dumped 10 more tons of waste into the river. He was sentenced to three and a half years (which is greater than the mandatory sentence for his act of illegal dumping).

Though the government has begun to account for violence in their conception of corporate environmental harm, the gravity of that form of harm is still not fully embedded in the national consciousness. This is evident in Ye Chang's continued murmurs of disbelief at his trial. His incredulity comes across as a remnant of the earlier mindset of developing at any cost. Despite China's official pronouncements in both its 11th and 12th five year plans, and multiple plenary session speeches about focusing on environmental protection, there are still many at the local level entrenched in that prior blasé attitude towards the environment (Government Official 1; Expert 4, 2014).

Promisingly, there is movement in urbanized areas where tech-savvy residents encouraged numerous protests against sites of visible toxic-waste dumping and proposed sites of another factory (Wasserstrom, 2009). Their signs displayed a growing awareness of the danger chemicals like paraxylene released by the factories posed to their health (Watts 2008). Due to the uniquely calm and legal nature of these protests, officials listened to their concerns and stopped production/development of those factories. Government-run environmental impact assessments have also led to the cancellation of future construction projects, such as Jiangsu's Chemical Industrial Park plan (Expert 4, 2014).

Conceptions of Harm

During the coding process, two general categories for types of harm naturally sprang up: physical and social. Though costs to human lives such as illness, injury, and death could be argued as a social harm, they were categorized solely under physical harms. This was due to the

way the data notated these examples and the purpose they served in case decisions. As with other forms of physical harm (detailed in the next sub-section), human costs were used as determining factors of which penalty to apply. Social harm examples on the other hand were utilized in an abstract way, reflecting the base ideologies of China's system.

Physical Harm

Since this study focuses only on environmental crimes involving water pollution/contamination, the types of corporate acts examined include: illegal dumping, waste smuggling, refusal to treat waste before release, and allowing pathogens into the water supply. The use of external parties to commit these acts, such as hiring a transport company or bribing an official to not report and punish such violations are also included. These acts can pose a hazard at various points throughout an enterprise's operating process: "during the production, distribution, use, storage, or disposal of [toxic] substances" (Salinger, 2013 in Ruggiero & South, 2013: 18).

The use of a third party was well represented in the case sample for this study. In the case summaries table (see table #) the criminal laws the defendants were accused of violating were as follows:

Article 115 Whoever sets fires, breaches dikes, causes explosions, spreads poisons or uses other dangerous techniques resulting in serious human injury or death or great loss of public or private property shall be sentenced to fixed-term imprisonment of not less than ten years, life imprisonment or death. Whoever negligently commits the crime mentioned in the preceding paragraph shall be sentenced to fixed-term imprisonment of

not less than three years and not more than seven years; if the circumstances are relatively minor, the offender shall be sentenced to fixed-term imprisonment of not more than three years or criminal detention.

Article 338 Whoever, in violation of the state's stipulations, discharges, dumps, or disposes radioactive wastes, wastes of carrying infectious pathogens, poisonous substances or other dangerous substances to land, water, or air, and causes a serious accident of environmental pollution shall, if the offence causes serious consequences of great losses of public or private property or bodily injury or death of another person, be sentenced to fixed-term imprisonment of not more than three years or criminal detention, and concurrently or independently be sentenced to a fine; if the consequences are especially serious, the offender shall be sentenced to fixed-term imprisonment of not less than three years and not more than seven years, and concurrently be sentenced to a fine.

Article 339 Whoever, in violation of the state's stipulations, dumps, piles up, or disposes solid wastes from abroad inside China shall be sentenced to fixed-term imprisonment of not more than five years or criminal detention and concurrently be sentenced to a fine. If the offence causes a serious environmental pollution accident and heavy losses to public or personal property or does great injury to people's health, the offender shall be sentenced to fixed-term imprisonment of not less than five years and not more than ten years and concurrently be sentenced to a fine. If the consequences are especially serious, the offender shall be sentenced to fixed-term imprisonment of not less than ten years and concurrently be sentenced to a fine. Whoever takes the liberty to import solid wastes as

raw materials without approval by relevant departments under the State Council and causes a serious environmental pollution accident shall, if the offence causes heavy losses to public or personal property or causes great injury to people's physical health, be sentenced to fixed-term imprisonment of not more than five years or criminal detention and concurrently be sentenced to a fine; if the consequences are especially serious, the offender shall be sentenced to fixed-term imprisonment of not less than five years and not more than ten years and concurrently be sentenced to a fine. Whoever in the name of utilizing raw materials imports solid wastes that cannot be utilized as raw materials shall be decided a crime and punished according to the provisions of Article 155 of this law.

Article 343 Whoever, in violation of the provisions of the Mineral Resources Law, mines without a mining license, enters without authorization and mines in mining areas that the state has planned to develop, in mining areas with ores of significant value to the national economy, or in other's mining areas, or exploits special kinds of minerals that the state has prescribed for protective exploitation, and refuses to stop mining after he is ordered to do so shall, if the offence causes damage to mineral resources, be sentenced to fixed-term imprisonment of not more than three years, criminal detention or public surveillance, and concurrently or independently be sentenced to a fine. If the offence causes serious damage to mineral resources, the offender shall be sentenced to fixed-term imprisonment of not less than three years and not more than seven years and concurrently be sentenced to a fine. Whoever, in violation of the provisions of the Mineral Resources Law, exploits mineral resources in a destructive way and causes heavy damage to mineral

resources shall be sentenced to fixed-term imprisonment of not more than five years or criminal detention, and concurrently be sentenced to a fine.

Article 383 Whoever commits the crime of embezzlement shall, in accordance with the seriousness of the circumstances, be respectively punished according to the following provisions:

(1) An individual who embezzles not less than 100,000 yuan shall be sentenced to fixed-term imprisonment of not less than ten years or life imprisonment, and may concurrently be sentenced to confiscation of property. If the circumstances are especially serious, the offender shall be sentenced to death, and concurrently be sentenced to confiscation of property.

(2) An individual who embezzles not less than 50,000 yuan and not more than 100,000 yuan shall be sentenced to fixed-term imprisonment of not less than five years, and may concurrently be sentenced to confiscation of property. If the circumstances are especially serious, the offender shall be sentenced to life imprisonment, and concurrently be sentenced to confiscation of property.

(3) An individual who embezzles not less than 5,000 yuan and not more than 50,000 yuan shall be sentenced to fixed-term imprisonment of not less than one year and not more than seven years. If the circumstances are serious, the offender shall be sentenced to fixed-term imprisonment of not less than seven years and not more than ten years. An individual who embezzles not less than 5,000 yuan and not more than 10,000 yuan, and

after committing the crime shows signs of repentance and gives up the embezzled money of his own accord, may be given a mitigated punishment or be exempted from criminal punishment, but shall be given a disciplinary sanction by his unit or competent authorities at higher level.

(4) An individual who embezzles not more than 5,000 yuan shall, if the circumstances are relatively serious, be sentenced to fixed-term imprisonment of not more than two years or criminal detention. If the circumstances are relatively minor, the offender shall be given a disciplinary sanction according to the circumstances by his unit or competent authorities at higher level. Whoever repeatedly commits crimes of embezzlement and goes unpunished shall be punished according to the accumulated amount of money he has embezzled.

Article 385 Any state functionary who, by taking advantage of his office, asks for other persons' property, or illegally accepts other persons' property, and secures advantages for them, shall be guilty of a crime of acceptance of bribes. Any state functionary who, in his economic activities, in violation of state's stipulations, accepts commissions and service charges offered in various names for their own possession shall be punished for acceptance of bribes.

Article 387 State organs, state-owned companies, enterprises, institutions, and people's organizations which exact or illegally accept articles of property from other people and try to obtain profit for other people shall be sentenced to a fine if the circumstances are

serious; moreover, their personnel who are directly in charge and other personnel who are directly held responsible for the crime are to be sentenced to not more than five years of fixed-term imprisonment or to criminal detention. Any unit listed in the preceding paragraph which, in its economic activities, accepts secretly rebates or commissions in various names without entering into its account shall be deemed as acceptance of bribes, and punished according to the provisions of the preceding paragraph.

Article 408 Any state functionary in charge of supervision and control on environment protection who neglects his duties so seriously that a great environmental pollution accident happens and causes heavy losses to public or private property, or another person's bodily injury or death, or other serious consequences shall be sentenced to fixed-term imprisonment of not more than three years or criminal detention.

These laws provide a comprehensive description of criminal acts that can result in injuries to the environment. The Ministry of Environmental Protection (and its local bureaus) provided ways to identify evidence of harm inflicted through environmental violations.

Descriptions of physical harms involved measures of toxicity of the water and its impact on the population. The assessments of water toxicity clearly implicated the company to the illicit pollution by calculating the resultant pH levels of the water, the amount of toxins in ppm, and the total tonnage of waste released or dumped by the offending company³. Water measured to be a pH level of 2.0 or lower was deemed “hazardous waste,” and thus a criminal level of damage by

³ There are still challenges in investigations in determining cause, leading to local authorities to drop the case (Government Official 1, 2014; Expert 3, 2014).

the courts⁴. The impact felt by the public was through the loss of access to safe, drinkable water. This was measured by the geographical area affected, the duration the contamination lasted, the number of people unable to access water, and the number of people who fell ill or perished from consuming the water. During investigations and early processing of these cases, the emphasis was on these short term consequences as they identified which penalties to apply. The long term consequences were more abstractly considered in discussions of the social costs, as the next subsection will cover in more detail.

Much of the language surrounding the evaluations of physical harms consists of comparisons to international standards⁵ issued by the World Health Organization. For example, longitudinal comparisons of average life span have been conducted to chart the extent pollution has affected the general public's health (Expert 2, 2014). To protect natural water sources like the Taihu Lake Basin and the Yangtze River, the provincial government integrated a three-tiered gradation system that designated more stringent restrictions on development for proximal areas⁶. One such restriction was that sewage treatment facilities were only allowed within ten kilometers of the lake and river. That example and others listed within this legislation were directly informed by the WHO's guidelines on groundwater protection released the year before (WHO, 2006).

The use of internationally accepted guidelines was also motivated by the Scientific Outlook on Development principle, “科学发展观” (ke1 xue2 fa1 zhan3 guan1). This was added to the Constitution in 2007 under Hu Jintao's push for scientific advancement as part of the overall modernization of the country's infrastructure. As part of China's Constitution, many of

⁴ Used in *The People's Procuratorate of Zhengjiang city v. Zhang Bao Lin, et al.*

⁵ One caveat should be mentioned regarding the standards implemented in China to determine physical costs to the environment: tests have been falsified regarding the data on toxic emissions.

⁶ This is from Jiangsu's 2007 revision of the “Regulation of Jiangsu Province on Prevention and Control of Water Pollution in the Taihu Lake.”

the provincial and national legislative documents collected for this study were sure to include this goal of scientific development. References to this principle were typically a general acknowledgement that the policy or law discussed in the document would “promote sustainable development.” A State Council report issued in 2011 on strengthening major environmental protection work elaborated the goals of 科学发展观" (ke1 xue2 fa1 zhan3 guan1) with the following passage:

We shall continue promoting a historical transition in environmental protection. We shall attach great importance to the interaction of environmental protection and development, continuously strengthen and comprehensively use legal, economic, technological, and necessary administrative means, take reform and innovation as the driving force, actively explore new sustainable methods for environmental protection featuring low cost, high benefits, and low emission, and establish a macro strategic environmental protection system, a comprehensive and efficient pollution prevention and control system, and an adequate and effective environmental quality assessment system, a complete system of environmental protection laws, regulations and policies and scientific and technological standards, a complete environmental administration and law enforcement system, and a social action system with participation of all people, in line with China’s national conditions.

Legislation pertaining to the specialized protection of the Taihu Lake basin accounted for this goal of scientific achievement into its plans, going as far as to identify the appropriate steps to take in balancing development and environmental preservation:

太湖流域各级地方人民政府应当贯彻科学发展观，落实环保优先方针，坚持先规划、后开发，先环评、后立项，在保护中开发、在开发中保护。

The local people's government at various levels within the Taihu Lake Basin shall apply the Scientific Outlook on Development, implement the policy of environmental protection first, stick to the rule of planning before development and environmental assessment before project approval, and develop the Lake under protection and protect the Lake during development.

This same legislative document also stated the overlap the goals of modernization and environmental protection have, by using scientific advancements to improve regulatory measures used:

太湖流域各级地方人民政府应当将推进水污染防治的科技进步纳入科技发展规划，列为科技发展的优先领域，加强水污染防治基础研究，推广应用水污染防治先进适用技术，积极开展蓝藻防治技术的开发应用，为综合治理太湖流域水污染提供科技支撑。

The various local people's governments of the Taihu Lake Basin shall incorporate into the science and technology development planning the promotion of scientific and technological progress on the prevention and control of water pollution and list it into the preferential domain of science and technology development, strengthen the basic research on water pollution prevention and control, promote and adopt the advanced technology applicable in water pollution prevention and control, and get actively involved in the

development and application of blue-algae prevention, and control technology so as to provide scientific and technical support for the comprehensive control of water pollution in the Taihu Lake Basin⁷.

The revision for the Water Pollution Prevention and Control law also incorporated 科学发展观 (ke1 xue2 fa1 zhan3 guan1) in the same manner, by focusing on the convergence of the development and preservation goals:

国家鼓励、支持水污染防治的科学技术研究和先进适用技术的推广应用，加强水环境保护的宣传教育。

The state encourages and supports the scientific and technological research on the prevention and control of water pollution, the application and promotion of advanced technologies, as well as the publicity and education of water environment protection.

Both of these excerpts represent China's attempts to employ modern techniques in its environmental regulation. The country has looked to its Western counterparts as a starting point for cutting edge technology that can inform its own research endeavors (one of the goals of the Special Economic Zones). For reducing environmental harm, China has implemented foreign technology such as a filtering system designed by a German company that uses sloping tunnels⁸ to separate rain water from dirty water (i.e. factory waste) to better prevent contamination of the water supply (GO 1, 2014).

⁷ The translations of the Taihu Lake Basin protection excerpts, and subsequent excerpts in this chapter, were provided by the database the (respective) legislative document was procured from, chinalawinfo.com.

⁸ The specific of this mechanism is dependent on the needs of the province and the geographical connection the respective lake/water source used for the city's supply.

This conscientious effort to be on par with the rest of the developed world demonstrates China's commitment to continue advancing its science, technology, and infrastructure, as well as more directly respond to the criticism of its environmental quality by other nations prior to the 2008 Olympics. Among that disparagement were concerns of the toxins in China's environment traveling through natural currents and impacting the ecological quality of other nations (White 2010). Spurred by the opprobrium of such attention, China was impelled to take significant steps to address its ecological issues. With industrial processes as a primary contributor to pollution, but a necessary component of China's developing infrastructure, involving corporations as partners in regulation would be prudent. Entrenching a green consciousness among existing obligations is a long term gambit that could pay off if supported by a strong regulatory foundation. If successful in this endeavor, an effective responsive regulatory system for corporate environmental performance seems possible for China as that conscientiousness towards the environment would influence companies to incorporate more self-regulatory and green practices.

Risk

In conservation criminology, the notion of "risk" is used as a basis for a discussion of the likelihood certain harms would come to pass from noncompliance (Gibbs, 2012). Though the rhetoric of "risk" was not explicitly stated within this study's collected data, the rules set forth nationally by the State Council or Ministry of Environmental Protection, or locally by the Jiangsu Province People's government, do imply some calculation of risk. Primarily, the regulations listed, which limit the location and types of operations of industrial development projects, are all in aid of reducing the chance of a negative environmental impact. The only time

the language of “risk” entered the government’s lexicon was in the Provincial Environment Protection Department’s regulations regarding the prevention and control of solid waste-based pollution, where article 40 stated:

鼓励和支持保险企业开发有关危险废物的环境污染责任险；鼓励和支持产生、收集、贮存、运输、利用、处置危险废物的单位投保环境污染责任险。

Insurance companies are encouraged and supported to develop insurance against environment pollution risk caused by hazardous waste; enterprises producing hazardous waste or engaged in collection, storage, transportation, recycling, and treatment of hazardous waste are encouraged and supported to cover themselves against the environmental pollution risk.

It should be noted that the Chinese phrase used to allude to the “environmental pollution risk” are the words for responsibility (责任 ze2ren4) and danger (险 xian1). The compound word these terms make essentially breaks down how “risk” would be considered in the context of the legal system’s response to serious pollution—the possible hazards for which one could be held liable. Curiously, this document regarding the handling of solid waste is the only one to include this term. The same provincial department issued regulations for other environmental contexts in subsequent years, such as water pollution, electronic waste, and catering kitchen waste with nary a mention. Those policies expressed a sense of inevitability to the damage that could be inflicted on the environment. This is a sentiment shared among the four experts interviewed for this study. The aforementioned three-tiered gradation zones of protection for water sources demonstrates this point clearly, as it bans certain types of buildings to be

constructed within 50 kilometers of a natural water source like Taihu Lake. Specifically, chemical plants or other industrial enterprises that deal with heavy-metal pollutants are prohibited from such areas. After the introduction of these new zones of protection, existing heavily polluting enterprises such as chemical plants, paper mills, electroplating factories, etc. were removed from those areas.

This restriction reveals that the government knows these kinds of companies are bound to release toxins and negatively impact the water quality, and thus the only way to protect the water source is to remove the source(s) of contamination. There is folly to this thinking, however, as wily companies can and have hired external parties, such as trucking companies, to dispose of their waste downstream. It also does not take into account the negative health impact these industrial sites may have on the populace if they are located too close to a residential area. Urban denizens have protested against proposed industrial projects (be it a factory, plant, or even a hydro-dam) to convey to the government that a great amount of damage can still be inflicted in locations away from water reserves (Wasserstrom, 2003). If the policy discussion considers the possibility that industrial corporations can operate with minimal defilement of the ecosystem, it can broaden its policy measures to encompass underhanded acts like hiring a third party to do their (literal) dirty work. There are other strategies being tried by the environmental protection bureau (e.g. pledge programs) that may better prevent these acts from occurring.

Based on the legislative texts alone, the procedural guidelines provided appear more reactionary in their acknowledgement of “accidents” happening, resulting in various contingency plans on how to minimize the damage and clean up any contamination (e.g. “blocking [the] sewage outlets” of a violating company)⁹. In doing so, the actual intent of the violator is not at

⁹ In the revision to the Water Pollution Prevention and Control Law as issued by the Standing Committee of the National People’s Congress in 2008.

issue for these procedural rules, rather it is all about reducing the harm as quickly as possible. That focus reflects the Confucian values of everyone working together for the common good and resolving matters quickly to restore social harmony as soon as possible. The sense of responsibility that also stems from that cultural tradition does play a role in criminal proceedings, as the cleanup costs of a given chemical spill are added to any sanctioned fines. *The People's Procuratorate of Changzhou district v. Jiangyin City Changsheng Chemicals, Ltd.* involved one of the larger clean up costs with a resultant fine of 1,570,000 yuan to cover the fees of removing the toxic waste dumped by the company.

Preventative measures are represented through mandates for green technology to be implemented by factories, attempts of regular and surprise inspections, as well as initiatives to educate the public. These measures, however, seem more in service of encouraging deterrence and incorporating these green actions as part of their duty/obligation as an operating company in China. This inherently involves a motivation of reducing the risk of incidents, but it comes across more as an all or nothing form of discussion than a spectrum of risk levels. At most, the discussions of future social harms contain an implicit risk of losing their sense of security.

The ultimate consideration of "risk" in environmental policy discussions is the possibility of environmental pollution leading to a state of emergency. The Ministry of Environmental Protection released a legislative document in 2011 depicting the measures taken in response to an environmental emergency. The ministry's definition of what qualifies as an environmental emergency is broken down into four levels, with level 1 referring to the most egregious situations and level 4 acting as a catchall for any situation that does not qualify under the other three levels. The scenarios described under these levels (listed in more detail below) do specify acts that corporations can commit. The issue of intent is not that crucial to the determination of criminal

liability and thus, allows the inclusion of accidents as a type of environmental crime by China's criminal justice system.

This legislation regarding environmental emergencies sheds light on the aforementioned Hu Wenbiao case. One of the listed situations that classify as level 1 emergency (those that are extremely serious) is the “interruption of centralized water drawing from drinking water source areas of a city at or above the prefecture level as a result of the environmental pollution” of which Hu's company's chemical spill led to. Other events that fall under this category are: environmental pollution leading to the death of more than 10 persons, poisoning of more than 100 people, the evacuation of more than 50,000 people, an economic loss of more than 100,000,000 yuan, the loss of a region's ecological function, the extinction of an endangered species, widespread radioactive contamination, or an international incident (MEP, 2011). All of these incidents involve criminally liable acts, though the threshold for human casualties is greater than what the court recognizes as a punishable offense of environmental pollution. The lower level emergency classifications primarily differ in the number of people impacted or how far reaching the contamination is geographically (e.g. incidents that cross provincial boundaries for level 2, incidents that affect multiple cities within a province for level 3). Level 2 emergencies cover the more typical industrial accident scenario that has appeared in the news and before the courts—the uncontrolled release of heavy metal pollutants or other chemicals through explosion, leaks, dumping, or improper storage.

Social Harm

The idea of social harmony, peace, and security is pervasive through the Chinese legal rhetoric. With the spate of news media revealing a growing number of protests immediately

responding to corporate pollution, it was expected that the disruption to peace would be attributed to the offending company. Instead, the courts' consideration of potential social costs caused by a corporate environmental crime was oriented towards the impact on future generations. Speaking of a duty to society as a whole, judges pressed for a need to provide a safe, secure and sustainable environment for generations to come. Throughout, their commentary towards the defendants was a repeated emphasis on the notion of duty.

责任 (ze2 ren4) is the Chinese word for duty or responsibility. Individually, the component characters also mean certain aspects of duty. 责 ze2 includes a factor of blame, speaking to the obligation to perform one's duty fully and correctly. 任 ren4 refers to being appointed to a particular position or rank which entails certain responsibilities. The frequent use of this word in the court judgments conveys the importance in Chinese society to do all that your position entails in contribution to ensuring society's vitality and harmony (present and future).

In the legislative documents, all records begin with a direct acknowledgment that the laws and rules that are about to be presented are intended to "safeguard" the public's health and society in general. Below are some examples of this promise:

Republic of China on Prevention and Control of Water Pollution and for the purposes of strengthening the prevention and control of water pollution in the Taihu Lake, protecting and improving the water quality in the Taihu Lake, **safeguarding the safety of drinking water sources and human health and promoting the compatible development of the economy, the society, and the environment.**¹⁰¹¹

¹⁰ All excerpt translations are from chinalawinfo.com, which is a Chinese legal database. Bold emphasis is not part of the original text.

Law of the People's Republic of China on Prevention and Control of Environment Pollution Caused by Solid Waste and other laws and administrative regulations, in light of the specific situation of this Province, and for the purpose of preventing and controlling the pollution of environment caused by solid waste, **safeguarding human health, maintaining ecological security, and promoting the sustainable development of the economy and the society.**¹²

These Regulations are enacted in accordance with such laws and administrative regulations as Environmental Protection Law of the People's Republic of China, Law of the People's Republic of China on Prevention and Control of Radioactive Pollution, and the State Council's Regulations on the Safety and Protection of Radioisotopes and Radiation Apparatus, in light of the specific situation of this Province, and for the purposes of preventing and controlling radioactive pollution, and **ensuring environmental safety and human health.**¹³

All of these statements represent the intertwined quality to the scope of environmental harm. Physical harms can lead to social consequences, such as the city of Yancheng being without water for three days due to the Biaoxin Chemical Co.'s leak contaminating the water supply with phenol. Given the importance industrial companies have for China's economic growth, the

¹¹ This is from the 2007 Regulations of Jiangsu Province on Prevention and Control of Water Pollution in Taihu Lake and was issued by the provincial environment protection department.

¹² This is from the 2009 Regulations of Jiangsu Province on Prevention and Control of Environment Pollution Caused by Solid Waste also issued by the provincial environment protection department.

¹³ This is from the 2007 Regulations of Jiangsu Province on Prevention and Control of Radiation Pollution that was issued at the provincial level.

government continues to remain cognizant of needing to balance its plans for continued (industrial) development with its commitment to protecting the environment.

A significant player in that balancing act is the supervisor. All of the policy documents collected for this study (be it at the national level or provincial level) included a section of procedures for monitoring those in charge of regulating pollution incidents. For example, in the regulations for controlling radiation pollution:

辐射污染防治监督管理部门有下列行为之一的，对直接负责的主管人员和其他直接责任人员，依法给予行政处分；构成犯罪的，依法追究刑事责任：

- (一) 对不符合法定条件的单位颁发许可证或者办理批准文件的；
- (二) 发现违法行为不予查处的；
- (三) 缓报、瞒报、谎报或者漏报辐射事故的；
- (四) 未按照规定编制辐射事故应急预案或者不依法履行辐射事故应急处置职责的；
- (五) 在监督管理工作中有其他失职、渎职行为的。

For units supervising the prevention and control of radiation pollution, the person directly in charge and other persons directly responsible shall be subject to administrative sanctions in accordance with law if they commit any of the following acts. If a crime is constituted, criminal responsibility shall be investigated according to law.

- (1) issue a license of approval to units that do not meet the legal requirements;
- (2) fail to investigate into and punish illegal acts;
- (3) delay, conceal, falsify the report of radiation accident, or fail to report it;
- (4) fail to work out a radiation accident emergency preplan as required by the provisions or perform the duty of handling the radiation accident emergency;

(5) any other negligence of duty or dereliction of duty in their supervision and management.

This emphasis on ensuring supervision is carried out properly further highlights the importance of fulfilling one's duty. During Confucian times, social harmony was maintained by each person performing their obligations, as each person's role contributed to the overall benefit of society. In the context of environmental pollution, following the requisites of one's job would ideally prevent the occurrence of harm to the ecosystem and/or the (human¹⁴) population and any disruption to the security and harmony of the community.

Social Morality

The emphasis on social harm is an important pathway to understanding the violence a corporation can enact on society through both its actions and inactions. Executives are educated persons, who should be aware of the hazards the emissions from the company pose on human and ecological health. Though there may not be intent to injure or kill any individual behind the decision to not treat wastewater before releasing it, awareness of potential human casualties should morally obligate executives to not commit that act. It is that moral duty that China is holding executives culpable to in their legislation and courts. The Supreme People's Court's interpretation of the 2007 criminal code revisions clearly states that not one life is an acceptable cost for advancement. Though that statement was particular to the present costs of an environmental crime, the courts do also consider the long term consequences which would

¹⁴ This study focuses more on the impact environmental harm has on human life/health, but China's legal system does include laws that specifically protect wild animals.

impact future lives. In the Haimen case, the judge took the defendants to task, bitterly calling them out for their lack of foresight on the consequences of their actions:

海门是人民的海门，青西河是人民的青西河。虽然现在因为水量基数大，也在不停地流动，河水中pH值测出没有什么大变化，但如果每个人都像你们这样，对我们的子孙后代会有什么影响，你们想过没有？

Haimen is the people's Haimen, the Qing xi river is the people's river. Although the current may be strong and great, and the pH amount may not have changed it much, what if everyone thought and acted like you? How would the future of our children and grandchildren be impacted? Have you considered that?¹⁵

The shaming in this judge's speech reflects the country's ideology that criminals are rational individuals who can be taught what is right from wrong. In Western societies, this characteristic is often the primary motivation to use cooperative techniques in regulating corporate behavior, but when the loss/injury of human life is (potentially) at play a stronger response by the legal system is needed (Comino, 2009; Braithwaite, 2006; 2005; Fortney, 2003).

That latter sentiment is expressive retribution, which has typically been used to defend the use of criminal sanctions against corporations (Laufer & Geis, 2002). In an impassioned plea, Friedman (1999) explains how moral condemnation in responses to corporate deviance allows for recognition of the victim(s) and the (far-reaching) social costs caused by a corporation's (in)actions. The 2009 case against Hu Wenbiao, mentioned earlier in this dissertation, has been acknowledged by the Supreme People's Court as a model case of "great

¹⁵ Translation is by researcher. Any mistakes are her own.

significance” for its “strict punishment of environmental crime, [helps to] strengthen [sic] the judicial protection of environmental resources.” Moral condemnation can also be seen in the above judge’s statement to the corporate defendants, where there is a sense of an underlying obligation to benefit and protect society as a whole. With China’s cultural history tied to the social mores of Confucianism and Communism, this collectivist view makes sense for their legal system.

Collectivism encourages behavior that is done to benefit the group over the individual. This is a familiar viewpoint in criminology, where corporate crime is defined as when an individual commits an act of deviance to benefit the corporation, regardless of any individual benefit (Frank & Lynch, 1992). In this cultural overlap, it seems to follow that, at least for Chinese corporations, by expounding on an existing sense of legal, social, and moral obligations to society, the government would want to cultivate a green consciousness as a means for regulation.

The courts are certainly attempting to educate defendants in being more environmentally-conscious. One judge highlighted our dependence on a healthy environment:

水产资源是全社会共同的财产，也是人类生存的重要自然资源。

Aquatic resources are the common property of the whole society, and important natural resources for human survival as well.

Another judge asserted:

毕竟地球是我们共同的家园，保护环境需要我们每个人、每个单位从我做起，从小事做起，只有这样才能给我们自己、给我们的子孙后代留一片青山绿水。

After all, the Earth is our common homeland, protecting the environment demands from each of us, only starting with ourselves can we give green mountains and blue waters to our children and grandchildren.

The notion of sharing natural resources is reiterated in both these statements. This speaks to the social and moral obligations that corporations could be held to. Wherever the company operates, it is legally and morally obligated to not only “the profit-motivated investors, but also creditors, customers, employees, and local communities” (Waseda Institute, 2012: 10). This is to be expected as corporations rely on the faith of both shareholders and consumers in their quality of practices and products to subsist and make a profit. A corporation must be cognizant of the finite resources it operates upon and shares with the surrounding community. Under the encouragement of these activist judges, corporations could exhibit a sense of citizenship by “moral[ly] commit[ting]” themselves to goals beyond “economic profits” (Gibbs, 2012: 350).

This seems to be the overarching plan by China in its evolving environmental regulation. Press releases from the environmental protection bureau reveal a larger conceit of a “green society.” This is predicated on a widespread education initiative to engender practices friendly to the environment, not just by corporations but by the general public as well. Within that context, any stigma that might be associated with sanctions against corporations for their non-compliance in disposing of their toxic waste becomes diminished and alleviates the problem of distrust between companies and regulators that criminal sanctions can foster (Simpson in Geis &

Dimento, 2002). Through their more detailed standards and relatively harsh sanctions as guides, the legal system is training companies to develop a “green conscience” within their corporate culture. Doing so, would, in turn, lay out a foundation for self-regulation by companies. This would be ideal for the environmental regulatory system. The next chapter discusses how cultivating an obligation to be green aids in balancing the tension between the political and corporate worlds, as the government simultaneously reprimands the partners it relies on.

CHAPTER FIVE

Guiding a disobedient partner: Perceptions of corporations in China

In China's shift from an agrarian society to a modern industrial one, corporations have been the building blocks of its new infrastructure. Through reformist economic policies issued during Deng Xiao Ping's reign, the nation gradually opened itself up to foreign investors. Through specifically demarcated areas known as Special Economic Zones (SEZs), the Communist Party provided a controlled and gradual process for introducing the country to international ideas, technology, and influence. Within the SEZs foreign companies enjoyed numerous incentives to invest and build. As more corporations from outside of China developed sites of operations in the SEZs, the country benefitted from alternate managerial strategies and new technologies used by foreign firms to improve its own local enterprises and expand its research and development in science and technology. Located near major ports, the burgeoning trade hubs soon developed into urban metropolises filled with both local and foreign-owned sites of industry and led to an unprecedented level of economic growth for the nation.

This boom was the start of a complicated partnership between the Chinese government and corporations (both foreign and local). China's economy depended on the infrastructure and operations of these corporate entities in its aspirations for modernization and to rise to the status of other developed nations around the world. Under the mindset of developing at all costs to achieve those goals, the government allowed industrial operations and construction projects to proceed with little to no restriction. Such permissiveness resulted in China's environment reaching a critical tipping point, and posing an obstacle for achieving recognition as a fully developed nation. The corporate partners that had helped China become a formidable economic

power, were also major contributors to the alarming pollution inundating the country's ecosystem. Under severe external and internal pressure to address its environmental problems before those problems could conceivably lead to severe ecological deterioration of other countries around the world, China officially pronounced that cleaning and protecting the environment would be a political priority (White, 2008; Xinhua, 2007).

Specific goals relating to the reduction of pollutants and strengthening of environmental regulation were explicitly incorporated into the country's 11th and 12th five-year plans. These goals still had to be balanced with China's need to continue development throughout the country, however. Attempts to balance these competing objectives were seen in environmentally-related legislation in statements regarding a full consideration of the environmental impact of a proposed development project, such as this 2009 statement from the State Council¹:

国务院有关部门、设区的市级以上地方人民政府及其有关部门，对其组织编制的土地利用的有关规划和区域、流域、海域的建设、开发利用规划（以下称综合性规划），以及工业、农业、畜牧业、林业、能源、水利、交通、城市建设、旅游、自然资源开发的有关专项规划（以下称专项规划），应当进行环境影响评价。

The relevant departments of the State Council and local people's governments at and above the districted city level and the relevant departments thereof shall make an environmental impact assessment when it organizes the planning of land use, and construction, development and utilization of regions, basins, and sea areas (hereinafter referred to comprehensive planning) and relevant special planning of industry, agriculture, stockbreeding, forestry, energy, water resources, transport, urban

¹ The central government institution that the Ministry of Environmental Protections falls under.

construction, tourism, and development of natural resources (hereinafter referred to as the special planning).

While this represented a start to allowing the dual pursuits of growth and preservation to co-exist, the polluting nature of corporations was still something that needed to be addressed. The 2007 amendments to the penal code introduced laws specifically to protect the environment and included articles that captured the most common illicit behavior such as the transfer and dumping of toxic waste (included in Article 338). That inclusion suggests an acknowledgment that corporations could perpetrate crimes, but would that sour the symbiotic relationship between the state and industrial companies? This chapter explores how corporations are perceived by the Chinese legal system and how urging corporations to consider maintaining a sustainable environment as part of their duty may resolve the tension between them and the state. The first section will further discuss the characteristics of enterprises that influence the positive and negative labels applied to them. The chapter will then consider the determination of criminal liability and the role of intent in a corporation committing an environmental crime. Lastly, issues of corporate compliance with environmental regulations are discussed.

Roles of corporations in China

Corporations only started becoming a significant presence in the late 1970s as Deng's Reform Era took hold. Though conservative party leaders remained wary, the high level of foreign direct investment and building of expansive industrial infrastructure was a welcome step forward for the country (Alder, Shao & Zilibotti, 2012; Liu & Wu, 2009; Gopalkrishnan, 2007;

Wong; 1987). From the success of the first few SEZs created in Guangdong and Fujian provinces, the attractive economic policies were expanded to more areas along the coast. The central government impelled local officials and bureaus to support enterprises in pursuit of increasing the nation's GDP. In these early days of industrialization, the interactions between state and corporations were generally positive. Corporate entities were treated as partners in infrastructure and their continued investment and contributions to the economy appeared indispensable for China's advancement. Thirty years later this reputation still exists as depicted in recently formulated legislation and conveyed by the government official and four experts interviewed for this study. Though foreign privately-owned firms were the catalyst for China's economic development, public and locally-owned enterprises also contributed significantly. The following subsection will describe the different type of company ownership and their particular interactions with the state.

Ownership

In the thirty years of Chinese reformation, investment patterns have led to a variety of corporate ownerships, including collectives and hybrid partnerships (Gao, 2013; Fryxell & Lo, 2001). Privately-owned firms fall along a spectrum in terms of the number of foreign shareholders they have from zero (domestic only) to multiple (joint ventures) (Gao, 2013; Woetzel, 2008). Public enterprises have also begun to undergo privatization, which this subsection will describe in detail after first introducing the main forms they take.

Public companies are divided into two major types: state-owned enterprises (SOEs) and township and village enterprises (TVEs). Between the two, SOEs are more prominent and widespread as they are controlled by the central government. Large SOEs may have local

branches. Management is appointed by the provincial government and incentivized to achieve high levels of economic performance with the promise of promotion within the Communist party (Li & Zhou, 2005). Top management is usually a chairperson and/or president (Andrews & Tomasic, 2006). An SOE will have both in control when the chairperson is somewhat “lack[ing] in commercial experience” and the president has technical expertise (Andrews & Tomasic: 284). When the chairperson is in sole control, a Communist party secretary is appointed for the position (Andrews & Tomasic, 2006). Andrews and Tomasic (2006) discovered through interviews with various company officers that the corporate governance model in which the chairperson is in control entails that all decisions must be signed off by them and them alone. This is due to the chairperson being the sole “legal representative of the company” (Andrews & Tomasic, 2006: 280). Though the Biaoxin Chemical Company was not definitively identified as an SOE subsidiary or a private firm, the fact that the chairman was prosecuted along with the director directly in charge of the faulty equipment suggests that the Chinese government is taking a broader view of corporate liability and social responsibility. This will be discussed further in last two sections of this chapter.

After Mao took power, all Chinese companies were SOEs and a primary source for employment. This began to change under Deng, where one of the incentives for foreign companies to build in China was the access to China’s cheap labor force (Liu & Wu, 2009; Gopalkrishnan, 2007). At this time, the output for SOEs began to slow and the large government subsidies provided to them were reducing economic gains. That loss motivated the National People’s Congress to begin the gradual process of privatizing small and medium-sized SOEs (Lin & Zhu, 2001; Wang, Xu & Zhu, 2001; Shirley, 1999). Larger SOEs generally provided vital goods or services, such as energy. Consequently, China consolidated its large SOEs to form

industrial giants to keep these vital sectors firmly in national control and allow SOEs to once again dominate capital attainment (Zhang, 2012; Lin & Zhu, 2001; Wang, et al., 2001). These moves affirmed SOEs' role as a "pillar of [China's] economy (Zhang, 2012: 1).

Compared to SOEs, township and village enterprises are much smaller in scope and are public companies serving their respective town or village. These are located "in rural areas and [on] the outskirts of large cities" (McDonnell, 2004: 960). TVEs can be collectives, with individual residents owning a stake in the company. The more intimate scope of these firms increases the ability to hold these companies accountable. Though SOEs have similarly frequent checks on their processes given that they are funded by and under the directive of the government, the fact that many of them handle heavy-metal pollutants and still use old technology inherently raises their (illicit) toxic emissions (Fryxell & Lo, 2001; Jaheil, 1994). This is currently changing due to the limited number of SOEs, freeing the government to provide the necessary subsidies to aid SOEs to purchase and implement the latest green technology (e.g. filtering equipment) (GO 1, 2014; Expert 1, 2014).

Potentially the biggest aid for SOEs is the recent reform allowing private investors to hold shares in SOEs and, thus, expanding its base funds for modernizing its equipment. These shareholders can be foreign partners, individuals, or entire firms. Typically they are silent partners, with minimal interference on the day to day operations (Gao, 2013). There are other public enterprises, though, which have undergone greater privatization and become a joint venture.

Joint ventures are when at least two firms form a partnership, and in China usually consist of one foreign company. Joint ventures with the state were initially incentivized through subsidization offers on mandated green equipment/technology (Expert 1, 2014; Gao, 2011).

Expert 1 disclosed that such companies, if large enough, have a special division to act as a liaison between the government and the enterprise's local branches to relay the latest updates to standards/legislation or equipment technology, as well as aid in procuring funds via the promised subsidies.

Joint ventures may not necessarily include an originally public enterprise. The multinational background of such enterprises may pose greater external influence on the values and priorities held within their corporate culture. In terms of environmental responsibilities, these firms might be more inclined to “impose high environmental performance standards” due to being held to stricter standards in their country of origin (Fryxell & Lo, 2001: 1944). There is also the possibility that foreign joint ventures may have the opposite reaction by taking advantage of the comparatively lowered standards and committing environmental crimes in the pursuit of increasing profits. There is currently no empirical evidence of how many joint venture firms partake in environmental crime, but as this form of ownership has become increasingly common the likelihood of one of the offending companies being a joint venture rises (Fryxell & Lo, 2001). Among the collected criminal case judgments, the company in *The Procuratorate of Ganzha District v. Ma Yong, et al.* was identified as a joint venture (involving a Japanese firm, where the main shareholder Noritada was also prosecuted). It was fortunate that the judgment included that detail, as most of the other cases did not contain that information (due to the judgment being a mere brief summary or news media relevant to the case not specifying the type of company) and so this was not a variable that could be analyzed for this specific study².

Negative Perceptions

² With China's recent 2013 crackdown on environmental crime and the releasing of more legal records of environmentally-related criminal cases, this is certainly a comparison worth pursuing for a future project.

Corporate contributions to China's severe environmental issues have cast a pall on their symbiotic relationship with the state. By virtue of environmental protection legislation, certain polluting behaviors carried out by enterprises officially classified them as violators. Through the 1990s there was little bite to this label, as most transgressions were never attended to by authorities and the ones that were received small administrative fines and little negative publicity over their act(s) (Wang, 2007; Ross & Silk, 1985). The lack of regulation in the first two decades of industrialization gave the impression there was no effective legal remedy for environmental harm and left the public feeling helpless about the deteriorating condition of their environment (van Rooij, 2006; Ross & Silk, 1985). The ineludible quality to the pollution problem posed by the multiplying presence of industrial companies gives the impression that these enterprises hold little to no regard of having a sustainable environment and sharing the natural resources with their surrounding communities. In the interviews conducted for this study, there were general comments alluding to the often corrupt nature of companies in their business practices and flouting of the law. Specifically for environmental harms, the project's participants were unsurprisingly resigned over the consequences of corporate pollution. Expert 4 summarized it best with a shrug of their shoulders and stating in a seeming defeated manner, "it's the cost of advancement." Expert 3 did allow for a glimmer of optimism by implying a way to improve the situation in their remark that the "state of [the] environment largely relies on environmental performance of these polluters."

The ongoing improvements to administrative and civil law forms of environmental regulation alongside the criminal amendments demonstrate China's attempts to increase ways to hold companies accountable for their environmental performance. For example, the State Council and MEP have introduced pledge programs, enhanced the administrative requirements

and records needed to operate, and allow “civic organizations to sue companies” on behalf of individuals (van Rooij, 2010: 70). The legal system, however, acknowledges that these methods alone are not enough to persuade companies to comply. In a similar vein to the cooperative model of regulation which white-collar criminologists have lauded for its accounting of the personality characteristics and moral center of white-collar criminals, there have been efforts by the courts and legislators to capture this aspect as well (Comino, 2009; Braithwaite, 2006; 2005; Fortney, 2003; Snider, 1990). Legislation related to environmental protection has been framed to impress upon potential violators that it is a “failure to fulfill one’s duty” if any of the specified harms occur as a result of their (in)actions. That language provides a basis for developing a green consciousness among future and existing polluters. Expert 2 defined a perpetrator of environmental crime as any entity (corporate or individual) who would pollute with *little to no regard* of the harm. Direct interactions with the legal system can make a stronger impression on offenders in getting them to reconsider their baneful behavior. Among the analyzed criminal judgments for this dissertation, there is one case in particular that takes the defendants to task over their “thoughtless” and “selfish” behavior of pouring chemical waste directly into the Qing Xi river.

The People’s Procuratorate of Haimen City v. Ye Cheng, et al. case provided numerous examples of this perception of thoughtlessness among corporate executives. In this case, a truck driver named Zhou Kai was instructed by his boss, Ye Cheng, to dump the chemical waste they were hired to transport to a filtering facility into the nearby river instead. Investigators found evidence that this illegal dumping, a violation of Article 338 of the criminal code, was conducted on four separate occasions, indicating that this was a habitual practice that these two did not

understand had devastating consequences to the environment and the future well-being of society.

The incident that led to their arrest was relayed in court as follows:

周开擦着汗水，向老板叶成抱怨道：“这天也太热了。”叶成也深有同感地说：“是啊，等运完这趟回来，不知道要几点了。”说到这里，叶成若有所思地停顿了一会儿，随即转头给了周开一个眼色：“要不，索性不要运到那个企业去好了，找个地方把废酸倒掉。”听到老板的建议，周开有些迟疑：“这。。。。。。万一被发现了怎么办？”叶成胸有成竹地说：“放心，反正我们要经过青西河，就倒在那里好了，趁着晚上，不会有人发现我们的。”

Zhou Kai wiping off sweat, complained to his boss, “Today is too hot.” Ye Cheng (the boss) agreed, commenting, “Yes, don’t even know when this transport task will be finished.” At this point Ye Cheng paused thoughtfully and winked at Zhou Kai, “Or, don’t transport [the waste] to that company, and just find some place to dump the waste.” Upon hearing this recommendation from his boss, Zhou Kai hesitated, “What will happen if we are found out?” Ye Cheng confidently says, “Don’t worry. In any case we will put the waste into the Qing Xi River at night; no one will discover us.”³

In response, the judge castigated the defendants, underscoring their lack of regard for the consequences and specifically the environment:

³ All court excerpts in this chapter were translated by the researcher, any errors are her own.

但如果每个人都像你们这样，对我们的子孙后代会有什么影响，你们想过没有？

What if everyone thought and acted like you? How would the future of our children and grandchildren be impacted? Have you considered that?

Thoroughly chastised⁴, the boss tried to defend his decision, but only proved how little consideration he had for environmental consequences, and how serious China's pollution issue is:

全程低低地埋着头：“我想肯定不会只有我一个人倒进河里的，别人肯定也做过，所以才倒的。。。真没想到会是犯罪这么严重

Ye Cheng bowed his head low: “I am certain I am not the only one to have dumped [waste] into the river, others must have done it, so [we] just poured it... I really did not think this crime would be so serious.”

Both this statement and retelling of how the decision was made exposes how Ye Cheng was aware that this act was illegal, exemplifying the interviewed experts' comments on how often corporations outright flout the law when it comes to environmental protection. It also shows the persistent holdover of the mantra of developing at any cost among companies.

While the Chinese government has made multiple pronouncements of shifting its priorities in development to incorporate environmentally friendly plans and procedures to result

⁴ In a rare instance, this written judgment consisted of a very detailed description of the case and court proceedings, including illustrative depictions of the defendants and judge's behaviors. Based on the other judgments collected for this study, case judgments seemed to be rather dry statements of the facts and case outcome.

in a green society, this new outlook is meeting with some resistance at the local level.

Companies that have political connections may benefit from local protectionism, where they are pre-warned of an upcoming inspection or they do not end up facing sanctions/prosecution over an incident (Tang, 2014; 2012; van Rooij, 2006). Thus, China faces a long journey to reverse the mentality that persists among local governments and companies. Using a multi-pronged strategy is prudent, as the different strategies will catch any variance between companies in terms of their response and exposure to those regulatory measures. Still, cooperative programs or the threat of imprisonment can only truly be effective if they are internalized by the potential (corporate) offenders. China has begun laying the foundation for that, by acknowledging that those in management of polluting companies ought to have moral centers and should act in the interest of the company's long-term survival and success.

Currently, the idea that taking steps to protect the environment ensures a company's viability is being developed under the coercive threat of administrative and criminal sanctions (Expert 1, 2014). For smaller companies this leads to a cost-benefit analysis between the total price of mandated green equipment and the fines for noncompliance (Gibbs, 2012). The threat of company shutdowns is also somewhat mitigated by the phenomenon of companies rebranding and building a new site in a different area, or even operating unofficially (which Navarro and Autry identified as a shadow factory) (Navarro & Autry, 2011). The key element would be to infiltrate corporate culture, where the company's missions/goals and normalized behavior would be changed to reflect an environmentally friendly disposition.

In the case against Ye Cheng and Zhou Kai, the lament by truck driver, Zhou Kai, exemplifies the importance of encouraging companies to train employees to act more green:

周开叹气连连：“当时我就不该听老板的，现在后悔也来不及了。”

Zhou Kai sighed wearily, “I should not have listened to my boss, but it now is too late for regrets.”

The events of Ye Cheng and Zhou Kai committing the act depicted at trial show the personal benefit (of finishing the job quicker and escaping the heat sooner) Zhou Kai gained from following his boss' suggestion, but his statement of contrition also emphasizes the influence upper management has on its employees. As the boss, Ye Cheng had the responsibility to guide his employees to act in accordance with the company's missions. But as white-collar criminology studies on corporate deviance have shown, employees will partake in actions that are illegal because their companies justify and even reward such behavior (Gibbs, 2012; Heath, 2008; Apel & Paternoster, 2002; Geis & Meier, 1977; Sykes & Matza, 1957). Corporate officials in China have commented to Andrews and Tomasic (2006) that the general rule of thumb they follow is to do just enough to “stay out of trouble” (280).

That attitude of doing just the bare minimum to comply hints at a sense of entitlement held by these corporate directors in terms of their use (or abuse) of natural resources. This connects back to the central moral issue of responding to environmental issues: balancing the right to freely pollute to allow for the success of industrial operations, and the right for people to have access to a clean and healthy environment. On a national level, there is official acknowledgment that it is a basic human right to have a clean and sustainable ecosystem (State Council, 2012). There are, however, millions of people whose livelihoods depend entirely on these industrial enterprises continuing to operate and can ill afford even a short-term interruption in work to meet higher environmental standards. In areas that are not as wealthy or are rural, the

balance tips towards the right to pollute to help speed along the development and economic growth process there. For the wealthier, urban areas, however, there is a greater moral obligation, which manifests itself through increased punitiveness placed on the enterprises located there to pollute as little as possible (Expert 4, 2014).

This variance in moral obligation also occurs among the different types of industries. There are 41 industrial divisions in China, but for this study the following industrial categories have been identified as major contributors to pollution of water sources: metal, petrochemical and chemical, heavy industry, textiles and leather, energy and power (coal/coking), and lead acid battery enterprises (National Bureau of Statistics of China, 2012). The waste discharge from these industries is the primary pollutant emitted. The illegal contamination from these discharges have been accomplished through the use of “secret discharge channels,” not filtering the waste before discharging, and the “false... operat[ion] of sewage disposal facilities” (Xinhua, 2012). While coal plants contribute more to the incredibly poor air quality of China, their discharges also seep into the ground water (GO 1, 2014). The metal industry, heavy industry, and lead acid battery industry are the ones that contribute heavy metal pollutants, which the MEP has especially targeted through its recent strike hard campaign in 2011.

For purely water contamination, however, chemical and textile mills have been labeled as the worst offenders and are the primary sources of toxic emissions. Environmental authorities released a report in 2010 divulging that “the textile industry [had] discharged 2.5 billion metric tons in sewage [that year], making the sector the third-biggest water polluter among 39 industries” (Li, 2012). The China Water Pollution Map compiled by the Institute of Public and Environmental Affairs (IPE) reported that “more than 6,000 environmental violations of Chinese

textile enterprises [have] been recorded” since the launch of the IPE database in 2006 (Xinhua, 2012; IPE, 2010).

These two industries are likely the most vilified industries due to the visibility of their pollution. When the Biaoxin Chemical Co. contaminated the water supply with phenol, the water turned red. Dyes are a main part of textile manufacturing, and consequently, the waste discharge from those factories often lead to the water turning into unnatural shades of color. Other chemical plants that have dumped toxins such as chromium and benzene have resulted in unpleasant odors and dead livestock (“Nine biggest,” 2014; State Council, 2011; IPE, 2010). The shocking sight of dead pigs floating down river was a direct effect of improperly disposed biomedical waste in Shanghai (“Nine biggest,” 2014). Such conspicuous signs of damage inflicted by illicit industrial operations raise the public consciousness of the lack of corporate social and moral responsibility. This extensive scope of harm not only elevates the attention paid to crimes transgressed against the environment, but also influences the extent of criminal liability applied. The following section discusses this point further.

Determining criminal liability and intent

When determining the liability of an alleged environmental crime, the concept of intent is complicated by the fact that an act against the environment can happen by accident or through general negligence. This complication is one of the debates behind the contested definition of an environmental crime in green criminology (White, 2008). As China has been evolving its own legal definition of environmental crime, its recent amendments to the penal code and subsequent SPC interpretation have included acts with no direct intent to harm. This stems from the overall

social expectation that everyone in the country has a general responsibility to maintaining the health, security, and harmony of society.

The actual language of penal laws Article 338 and 339 (which most directly relate to water pollution causing environmental crimes) are void of any reference to motivation or the willful committing of any “serious environmental pollution.” Article 115, which was applied in Hu Wen Biao’s case, however, does differentiate between willful and negligent environmental crimes by specifying a reduced range of penalties for “whoever negligently commits the crime” of “set[ing]fire, breach[ing] dikes, caus[ing] explosions, spread[ing] poison, or us[ing] other dangerous techniques” which result in serious damages or human loss. The choice to not mention such a distinction in Articles 338 and 339 possibly suggests that at the base level, anything beyond acceptable limits of pollutants will not be tolerated regardless of the reason it occurred. Any degree of blamelessness for industrial enterprises’ polluting being an unavoidable result of their operations is removed by these legal definitions (and the SPC interpretations). The specific standards the laws and court interpretations have set for corporate entities to adhere to not only place a duty of environmental protection as part of their occupational responsibilities but to society in general as well⁵. While this responsibility is also reflected in Article 115, the much harsher punishment for willful violations reveals that the sheer scale of the harm incurred (usually something applicable to one of the four designated emergency levels) demands an especially strict response in the vein of Friedman’s “expressive retribution” (Friedman, 1999; 1965).

Expressive retribution refers to criminal punishments that represent a moral condemnation of a particular deviant behavior, and acknowledges both the victim(s) and the

⁵As Faure and Zhang (2011) put it, by making “violations of state regulations” a condition of criminal liability, intent [is] implied [through the accused’s] knowledge of the illegality” (10039).

social costs caused by the offender's (in)actions. In its application for corporate crime, Friedman (1999) argues that it may have a more lasting deterrent effect than civil liability, as it applies a stigma to the offender's character and reputation. For Chinese offenders, such stigma may be particularly potent as a deterrent due to the country's cultural tradition of saving face and avoiding shame. Though empirical studies need to be carried out to see if this does curb environmental crimes, the concept of shame is represented in environmental criminal trials. Namely, defendants who show remorse and acceptance for their wrongs are granted leniency in sentencing by the presiding judge (Liebman, 2014; Liu, Zhao, Xiong & Gong, 2012; McConville, 2011).

This leniency shown by judges for remorseful defendants appeared to be a way of rewarding internalization of guilt over one's actions. Under Confucianism personal acceptance of one's wrong doings was the first step for an offender to learn from their mistake and become a contributing member to society. In the context of environmental criminal cases, this form of reintegrative shaming played out in the courts as an important component to fostering a green conscience among (corporate) violators. Paired with the berating by judges on how misguided and destructive the defendants' (in)actions were, acknowledgment through a confession and/or statements during the trial by the accused helps to begin the process of forming awareness of how environmental protection must be accounted for in their operating processes. Though their acceptance of this notion may be superficial initially, other components of China's overall environmental regulatory infrastructure work in tandem to develop a green conscience. For example, continued violations result in much tougher sanctions applied, and thus, in that sense this leniency shown by judges can be a first strike amnesty.

Within this study's case sample, the cases that involved a confession by the defendant resulted in sentences at or close to the minimum possible punishment. For example, Yang Weimin, who turned himself in to the police⁶, received the absolute minimum associated with a violation of Article 338: 1 year imprisonment and a fine of 30,000 yuan. In *The People's Procuratorate of Ganzha District v. Ma Yong, et al.* case, all four defendants were sentenced close to the minimum 3 year imprisonment for a violation of Article 343. In *The People's Procuratorate of Wuxi City v. Jiao Weicheng*, Jiao Weicheng's greatly reduced punishment of 6 months in prison was not explained in the judgment summary, but likely followed the procedural rule listed in section three of Article 383 (the general law on bribery/extortion), that if:

...after committing the crime, [the defendant] shows signs of repentance and gives up the embezzled money of his own accord may be given a mitigated punishment or be exempted from criminal punishment, but shall be given a disciplinary sanction by his unit or competent authorities at higher level.

Though Confucianism still exerts influence over the processes of China's legal system, the pluralistic cultures in current society has also introduced Western values which are at direct odds with Confucian deference to tradition and the group as a whole. The clash between these two rather opposing ideologies has created a complex situation where behaviors are shaped by different aspects of each dogma. Younger generations are becoming more individualistic and materialistic in their habits and perspectives. This can also be seen in business practices that lead to willful acts of environmental harm, such as the Ye Cheng and Zhou Kai case discussed above. Other examples include *The People's Procuratorate of Danyang City v. Yang Weimin*, where

⁶ Granted he did so only after he noticed the site of the illicit act was being investigated.

Yang used another site to operate some of his business off the books and committed illegal waste dumping:

2013年6月1日，杨某见该业务利润较大，遂在联丰溶剂包装厂的西北角处偷偷的设了洗桶点以个人名义继续经营。

On June 1, 2013, Yang offered much larger profits to the business to secretly operate his washing bucket business in the Northwest corner of their solvents packaging factory.

In addition to using sites away from one's actual business, corporate violators of environmental protection laws also bribed officials (state and non-state) to conduct their illegal dumping without interference. In *The People's Procuratorate of Changlang District, Suzhou City v. Xu Huojin* case, two companies in Jiangsu bribed Xu Huojin to falsify environmental impact assessment records. *The People's Procuratorate of Wuxi City v. Jiao Weicheng* case saw the defendant Jiao Wei Cheng accepting bribes from multiple companies throughout Jiangsu province to overlook their dumping of illegal waste into the Yangtze River and lakes.

Though the full case documents on the companies involved in these noted bribery scandals were not publicly accessible, the aforementioned cases against Xu Huojin and Jiao Weicheng were included in the sample due to the significant environmental harms that occurred with the aid of these corrupt officials. Furthermore, the incidence of environmental criminal cases stemming from bribery scandals was impacted by the national crackdown on state corruption in 2009. In this crackdown, the focus was to punish those who *received* bribes, rather

than the bribers themselves⁷. Under the political mandate of this strike hard campaign, the procuratorate actively pursued cases against corrupt officials. But as McConville (2011) revealed about the procuratorate's general nature towards prosecution decisions, the procuratorate treaded more cautiously in prosecuting those who allegedly bribed those officials.

The decision to prosecute companies involved in bribery scandals was also affected by misunderstandings over how *guanxi* should be performed⁸. *Guanxi* is the building of a relationship between (at least) two entities that may include exchange of favors. The reciprocating of favors between the entities is never with a specific result in mind or a specific time frame within which to be met. The gifts given as gratitude in advance to officials who allowed companies to commit environmental crimes were misidentified as *guanxi* providing a convenient excuse by companies as they were indeed bribes in aid of perpetrating a crime.

Even with these deliberate acts defying environmental protection laws, the perpetrators are not distinctly identified as “criminals”. Despite the criminalization of environmental harms through the 1997 and 2007 amendments to the penal code, there appears to be careful avoidance to use the term “criminal” for those who violate environmentally-related laws. The general Chinese term for criminal is 罪犯 *zui4fan4*, yet among the court and legislative documents collected and analyzed this phrase was never included. Instead of appending the label of “criminal” to the accused, these archival records chose to highlight the *act* of committing a crime or offense (犯罪 *fan4zui4*) by frequent use of the term. One example is in the SPC interpretation of environmental crimes:

⁷ Starting in 2013, the Ministry of Public Security shifted to focusing on the givers rather than the receivers in an act of bribery.

⁸ See Dunfee and Warren (2001) for a discussion of forms of *guanxi* conducted in the Chinese business setting.

单位犯刑法第三百三十八条、第三百三十九条规定之罪的，依照本解释规定的相应个人犯罪的定罪量刑标准，对直接负责的主管人员和其他直接责任人员定罪处罚，并对单位判处罚金。

Where an entity commits any of the crimes provided in Articles 338 and 339 of the Criminal Law, the directly liable person in charge and any other liable persons shall be convicted and punished according to the relevant conviction and sentencing standards for crimes committed by individuals as prescribed in this Interpretation, and the entity shall be imposed a fine.⁹

This distinction seems to represent more of what the legal system's response should be to actions against the environment (i.e. "punish according to criminal law") (State Council, 2012). Furthermore, it prevents outright ostracizing¹⁰ corporate entities that have helped China achieve its exponential economic growth and widespread development. This is different from the shaming used during trial, as that is done with recognition that the defendants are respectable individuals who, though misguided, can learn from their transgression to reassimilate into society as contributing members. Not having the stigma of a criminal label follow after one's punishment is critical for a corporate executive and the company as a whole, as their continued success depends on having an overall positive reputation within their surrounding community.

Oftentimes the reference to an environmental crime is stated as an "act of disobedience" (GO 1, 2014). The initial responses by the legal system also reveal the norm of economic

⁹ Translation provided by Chinalawinfo.com.

¹⁰ One of the issues Simpson, Garner & Gibbs (2007) bring up about using a punitive and deterrent model of regulation for corporate deviance.

punishment, saving prison sentences for offenses that resulted in especially devastating consequences (GO 1, 2014). In incidences of the latter form, it is also the individuals and/or departments (in both corporate and state institutions) directly in charge of preventing excess environmental harm (be it for general monitoring of processes or a specific type of equipment that malfunctioned) that are held criminally liable. In the Hu Wen Biao case the chairman of the company was in charge of all decisions and so, shouldered the blame of any misconduct perpetrated by the company; however, the factory director in charge of monitoring the day-to-day processes of the Biaoxin Chemical Co. was also held criminally responsible (Andrews & Tomasic, 2006). In *The People's Procuratorate of Funing County, Yancheng City, v. Cui Mou* case, the provincial supervisor of the Yancheng Standard Chemical Co., Ltd.¹¹ was charged with dereliction of duty for allowing “the serious environmental pollution accident” to occur. The application of that law to an environmental crime reiterates how much the policy and legal regulation documents entangle the idea of a responsibility to protecting the environment with determining the criminal liability for environmental harms.

Urban versus Rural polluting enterprises

Unofficially, there is a reduction of the criminal liability for enterprises that pollute in the more rural areas of China. This is more of a function of the capacity issues regulators and law enforcement face due to fiscal constraints in the countryside. Much like how the urban areas faced in the early days of their development, rural townships and villages generally still favor development practices that most quickly increase the GDP, regardless of the environmental impact. That inclination is motivated by township and village level governments needing to cultivate their own financial revenues (Tang, 2014). The fledgling infrastructure of

¹¹ The one company that was clearly identified as a state-owned enterprise within the sample.

environmental regulation in rural sites is further impaired by this lack of funding, compelling the judge presiding over the *People v. Rudong New Energy Co.* case to insist that:

要想真正控制污染向农村转移，除了制定完善的法律之外，还应该保障环保法律在农村的有效实施，进而完善农村环境监管体制，加强农村的环境执法力度，发挥村民委员会的环境监管作用。

If we wish to genuinely control pollution in rural areas, we must guide village committees to oversee and regulate their rural environment by ensuring laws we implement are sound and strengthen environmental enforcement.

This need for guidance is exemplified in Expert 1's remarks comparing urban and country areas: "city located [enterprises] are well-controlled and policed strictly, while those in the countryside are hard to control" (2014). Tang (2014) reached a similar conclusion in his survey of foreign-owned enterprises in Guangzhou, where companies closer to the urban center were more easily accessible and thus, seemed to be inspected more often. In the interview with government official 1 (GO 1), it was attested to that rules are not as strictly controlled in rural areas as in urban areas, due to the fact that the countryside has more place for development and expansion. GO 1 also shared that all the industrial factories in Nanjing have been moved to the suburbs away from the main city due to the very strict city development regulations. That is, the limited space for the city's population required heightened control over new construction projects, and encouraged attentive policing of the environmental impact of any remaining industrial sites.

The following chapter further discusses issues in compliance while introducing the various strategies China has used in its environmental regulation, and argues that through this regulatory experimentation, China has begun developing a responsive infrastructure for long-term environmental regulation.

CHAPTER SIX

A multi-pronged plan: Setting the foundation for responsive environmental regulation in China

China's environmental regulation has undergone much of its evolution in the past decade. While the concept of protecting the environment was officially recognized in the country's Constitution in 1979, actual legal protection seemed to be confined to legal tenets until the 1990s (Wang, 2007; van Rooij, 2006). Only through amendments to the penal law in 1997 and 2007, as well as the creation of a specific authoritative agency for environmental issues, did China begin to build an increasingly comprehensive regulatory infrastructure for environmental protection. This chapter charts China's gradual formation of a promising foundation for a responsive environmental regulatory system.

The first form of enforcement against environmental harms were rarely imposed administrative fines issued by the Ministry of Public Security (the main authority for all of China's law enforcement and security issues) during the 1980s and most of the 1990s (Zou & Zhang, 1993). During this period the physical impact of pollutants was still not fully understood and standards were vaguely written. The handful of environmentally-related laws promulgated at this time mainly provided general provisions for government actors to help protect the environment in specific contexts (Alford & Liebman, 2001). Namely, they were idealistic guides on how to prevent and control pollution of the water (1984), forests (1984), grasslands (1985), and air (1987) (Alford & Liebman, 2001). Other regulations were passed at this time, but still suffered the same problem of ambiguity.

The lack of clarity in what exactly was punishable posed a major challenge for implementing these laws by any authorities who may have been inclined to sanction a violator. The main obstacle to preserving the ecological quality of the country, however, was its driven focus to modernize through accelerated development. As one of the four modernizations decreed in 1978 by Deng Xiao Ping¹, industrialization was a high priority for the government. Thus, economic policies (e.g. the Open Door Policy and special economic zones) were created to encourage investment and a plethora of construction projects to steadily urbanize the nation. Local governments were directed to increase the GDP of their respective prefecture as much as possible. The central government added the incentive of providing more funding support to these local branches that succeeded in GDP growth. Under this edict, a mindset of “developing at all costs” became the ruling principle leaving the state of the environment as barely an afterthought.

As China’s industrialization expanded from the coastal areas to the central interior, the visibility of pollution became harder to ignore. The specific pollution laws like the Water Pollution Control and Prevention Act that were introduced in the 1980s underwent revisions clarifying the limits of acceptable pollution. In 1997, the penal law was amended to include specific laws pertaining to environmental protection (Faure & Zhang, 2011). Though a marked improvement over the arbitrary application of other existing criminals laws (mainly Articles 115 and 187) for severe pollution cases, these laws still lacked clear criterion of what constituted a criminally liable environmental harm and were paired with rather toothless punishments—the maximum prison sentence being three years.

¹ These goals were first put forth by former Premier Zhou En Lai in 1963, but were only officially adopted under Deng’s reign.

This drastically changed in 2007, when rising protests by urban residents who were now used to a much higher standard of living and criticism from foreign governments over the toxic state of China's ecosystem spurred the government to directly and strictly address its environmental issues. The amendments to the criminal law introduced more forms of environmental crimes (including destruction of cultural relics) and raised the associated punishments to a *minimum* of three years in prison for the act of causing "severe environmental pollution." The change that demonstrated the seriousness the country was now approaching environmental issues was the increased severity of penalties for Article 115. Before 2007, violations of Article 115, such as the spread of poison from a "serious accident," resulted in a maximum sentence of seven years in prison. After 2007, Article 115 was as follows:

Whoever commits arson, breaches a dike, causes explosion, spreads poison or inflicts serious injury or death on people, or causes heavy losses of public or private property by other dangerous means, shall be sentenced to fixed-term imprisonment of not less than 10 years, life imprisonment, or death.

The law now incorporated deliberateness to the act and covered incidences that would officially qualify as a state of emergency. Most representative of China's shift in priorities was the inclusion of the harshest punishment possible for this offense: the death penalty. Though the revised version of Article 115 was famously applied in the Hu Wen Biao case, the maximum penalties of life imprisonment and the death penalty have not been issued to date. Likely, these penalties are there to act as the ultimate threat for continued violators of environmental protection. In that regard, China's environmental criminal laws are set up to work within a larger

environmental regulatory infrastructure that not only utilizes punitive strategies but cooperative ones as well. The following sections identify specific methods that best match the models white-collar criminologists have proposed for effective regulation of corporate offenders: cooperative, punitive, and responsive regulation. Issues of compliance and capacity are discussed. The chapter concludes with a modified responsive regulatory pyramid representing what China has constructed thus far for environmental regulation, and how with the successful cultivation of a green conscience that foundation offers a promising pathway for long term effective regulation of the environment.

Cooperative

The subfield of white-collar criminology has identified a general pathway of the type of regulation used for corporate offenders in Western settings from a cooperative model to punitive and finally some form of combination of the two in a responsive regulatory system (Comino, 2009; Gustafson, 2007; Braithwaite, 2006; 2005; Dutcher, 2005; Forney, 2003; Geis & DiMento, 2002; Brickey, 1997; Snider 1995). Similar to its Western counterparts, China's early forms of environmental regulation followed a cooperative model utilizing strategies of self-regulation and administrative sanctions.

Under the cooperative model, business leaders are essentially partners with the state in governing corporate crime (Laufer & Geis, 2002). This equal status afforded to corporate executives reflects the perception that they are respectable and rational individuals who can be persuaded to participate in their own regulation (Comino, 2009; Braithwaite, 2006; 2005; Fortney, 2003). China certainly takes this general perspective towards the corporations within its

borders. In recent years, government officials have held meetings with business leaders to discuss how to improve environmental regulations and transparency (Finamore, et al., 2013). China's positive conception of corporations stems from the symbiotic relationship developed between the state and enterprises in the 1980s. Since the start of the reform era (ushered in by Deng Xiao Ping), corporations have been viewed as partners in China's endeavor to modernize and achieve great economic growth. In exchange for their investment and continued economic gain, China offered tax incentives and lax policies. That willingness to reduce the limits imposed on companies operating within the country set a precedent for overall lenience in regulating corporate practices. Coupled with the aforementioned mindset of prioritizing development over preservation of the environment, initial regulatory methods were unsurprisingly not very strict in holding businesses accountable for their violations. Furthermore, by having influence in how their behavior would be controlled, corporations could easily fashion what little constraints are placed on them to favor their circumstances.

The ability afforded to corporations under the cooperative model was one of the main criticisms criminologists had for the effectiveness of this form of regulation (Snider, 1990). Additionally, the close partnership between business leaders and the state left government officials susceptible to corruption, where executives could increase their advantages even more (Laufer & Geis, 2002). China's laws are especially cognizant of this aspect, with multiple rules in place to "control the controller²." Specifically for environmentally-related law, the legislation passed at the national and provincial levels include comprehensive sections on the procedural rules those in a monitoring or supervisory position must follow as well as the disciplinary and criminal sanctions for those who fail to fulfill their duty.

² One of the prominent questions posed by critics of the cooperative model for corporate governance is "who controls the controllers?" (Laufer & Geis, 2002; Snider, 1990).

Currently, environmental regulation utilizes the cooperative-based strategies focused on increasing transparency and accountability. The primary approach by China has been to increase monitoring through recordkeeping. For example, environmental impact assessments (EIA) became a mandatory step for the commencement of all construction projects and operative processes by industry. Bureaucratic supervision was also escalated with environmental protection bureaus requiring paperwork not only for a general license of operation, but also to handle certain materials (e.g. heavy metal pollutants) and to operate within certain geographical areas.

The numerous procedural steps and records required for an enterprise to conduct their business theoretically raise the accountability of each company, but are vulnerable to falsification of documents. The EIAs, for example, are typically self-reported from the company and infrequently followed up by independent sources to confirm their accuracy. EPB inspections are dependent on the resources available to the respective agency, as well as the location of a given company (GO 1, 2014; Tang, 2014). Those located closer to the city center are likely to be inspected more often. As one enforcement official relayed to Wang (2009), they “did not have regular access to a car to get to the factories” for inspection, making those located in the suburbs or countryside much more difficult to reach (1). New technology is being implemented on an experimental basis in Nanjing to aid with this issue. This study’s interview with government official 1 revealed a type of computer monitoring of water quality that utilizes foreign standards of inlet vs. outlet gradations to measure the discharge flow of a respective company. Though this system has the potential to alleviate the strain on resource-strapped EPBs, it is currently being tried out as a supplement to the inspections carried out by the Nanjing EPB’s water department to check the water in areas that have been designated for “special protection” (GO 1, 2014). As

the technology is in the testing stage, it is not something the EPB can fully rely on as the bureau is held responsible if their monitoring system misses anything.

Through the regular monitoring of natural water sources, China has developed records of the impact corporate pollution had on water quality. Specifically, the State Council and Ministry of Environmental Protection created databases, such as the water pollution map, to chart the types and amount of toxic emissions industrial sources have made from municipal to provincial levels (IPE, 2010). A few years ago, these databases were also accompanied by an online list of the top 20 polluting enterprises, but that was taken down in 2013. In its place, China formed a blacklist of companies with incredibly poor environmental performance. Once a company is placed on the list they have a specific period of time to comply with regulations or face permanent shutdown (MEP, 2011). This blacklist does not appear to be publicly available, however, in May of 2013 the MEP did publish a list of major industrial accidents that caused “serious environmental pollution.”

That list provides data on the time, location, companies involved and the specific corresponding response by the local EPB. In the press announcement about the list, the MEP declared that their responses to these types of incidents would be “made public for social supervision” (MEP, 2013; Shen & Tan, 2013). This notion of “social supervision” certainly represents the ideological influences of Confucianism and communism with its use of the whole group to regulate the behavior of an individual entity. By disclosing official acknowledgment of the corporate environmental violations, this list increases accountability for both officials and the listed companies to follow through with their remedies for any environmental harm incurred. That increased transparency helps strengthen regulators’ credibility and could bolster the foundation of a responsive regulatory system.

This list on industrial-caused environmental accidents also provides the possibility of using reintegrative shaming on offending companies. A given company is exposed to public shaming by being included on such a list and most likely would lead to loss of public trust in their goods and services. The stated goals of how the environmental harm would be rectified convey to the public how the respective company would learn from their transgression and improve and continue to contribute to society. If the company remains noncompliant and does not request an extension through the local environmental protection bureau, then they are permanently shut down³. For offending companies whose illicit pollution has inflicted a lesser amount of harm, they are notified by the local EPB to fix the source of the excess toxic discharge by a specific deadline. If they miss this deadline, they are then assessed daily meter penalties until they are fully compliant (Expert 1, 2014).

In addition to the water pollution map (available at the Institute of Public and Environmental Affairs website), the State Council has also conducted a national general survey of pollution sources. Performed in 2007, this survey was used to identify pollution sources around the country, and informed regulations that were issued later that year to provide a “legal basis [and] guide” for local EPBs and other environmentally-related departments to more effectively regulate (State Council, 2008). The State Council has also touted this survey for helping to “establish a database of over 5.92 million pollution sources” (State Council, 2008).

These databases, which are publicly available on the official government websites represent China’s attempt for transparency in its environmental regulation. To more directly

³ In November 2014, the State Council altered this blacklist to reflect a much harsher stance. The central government introduced an environmental credit system in which any company that accrues enough violations it will be shut down permanently without a probationary period. The State Council’s announcement of the new policy concerning this blacklist noted that it would be released to the public on the government website with the goal that the public become aware of the businesses’ “dishonest practices,” and possibly limit the patronage of the company’s goods/services (State Council, 2014).

hold companies accountable, the Ministry of Environmental Protection designed a pledge program where registered enterprises would sign an official document promising to reduce toxic emissions/discharges. The companies that do pledge are listed on the bureau's website, theoretically creating a public expectation that the companies will indeed follow through with lessening their polluting behavior. This particular strategy supports a call of duty to the environment by getting companies to officially state a promise to help turn China into a green society. While the specifications of *how* that promise will be achieved are lacking, the act of pledging in and of itself is an important first step. This program hopes to encourage the start of incorporating an explicit statement of social and environmental responsibility into the company's mission/goals. At the very least it provides the contract that can keep them legally beholden to maintain green behavior. As a possible long term impact, this program provides a new forum for communication and collaboration between business leaders and state regulators. Officially registered non-governmental organizations also offer support in this program. This form of in tandem regulation somewhat speaks to Gunningham and Grabosky's (1998) expansion of Ayres and Braithwaite's (1992) responsive regulatory pyramid, which argues that businesses and non-state actors each warrant their own pyramid and together with the state can build a regulatory tetrahedron supported by multiple sources of governance.

Punitive

In the general pathway for corporate environmental regulation observed in Western nations, a punitive model supplanted the cooperative model. This was intended as a strong response to answer critics of the cooperative model who had pointed out that it afforded too

many advantages to corporate offenders to be effective (van den Huevel in Laufer & Geis, 2002). Under the punitive model, criminal sanctions were pursued against violators in lieu of administrative fines that critics had noted were easily afforded by the punished companies and did little to thwart their deviant behavior (Snider, 1995). Criminal penalties included prison time and hefty fines to provide a greater deterrent against noncompliance (Dutcher, 2005; Reitze, Jr., 2002; Jessup, 1999). In the United States, this model of regulation was impelled by environmental activists, who in the wake of disasters such as Three Mile Island and Love Canal knew that these acts needed a much stricter response from authorities. That backlash of grassroots activism among the public represents the other motivation for using a punitive model: retribution. The significant harm and injury inflicted by corporations disregarding environmental imperatives aroused an anger that demanded justice equal to what the criminal act took away. A mere fine would not be adequate to satiate this emotional cry for reparations when exploitative or negligent corporate practices resulted in the death of loved ones, significant injuries, or long term illness such as cancer.

This latter motivation for a punitive model certainly fueled the forceful statements by Chinese officials for the nation to strike against environmental offenses with much tougher measures⁴. Wang Jinjin, vice dean of the Chinese Academy for Environmental Planning and a city legislator, particularly called out a need for Chinese legislators to change existing “tofu law[s]” for environmental harms (Xinhua, 2014). The term “tofu law⁵” plays on the soft and unbinding nature of tofu to describe the anemic environmental laws heavily criticized by scholars (Stern, 2011; Wang, 2007; van Rooij, 2006; Faure & Zhang, 2001; Zou & Zhang, 1993;

⁴ This was expressed multiple times from National People’s Congress and State Council through the 11th and 12th five year plans, and separate press announcements during the period of 2005-2013.

⁵ It is also evoking the poorly constructed structures (“tofu buildings”) that exacerbated the destruction and loss of life from the 2008 Sichuan earthquake.

Ross & Silk, 1985). Unlike its Western counterparts, the environmental specific laws added to China's criminal code (in 1997 and amended in 2007) were not meant to replace the default response by law enforcement. Rather, criminal laws served two purposes within China's overall environmental regulatory structure. The main application of criminal penalties was to directly castigate corporations that inflicted severe harm on the environment and the populace. This addressed the need for expressive retribution through moral condemnation from society. In China, where maintaining social harmony is incredibly important, striking hard against those who threaten that harmony as well as the security of the citizenry was the natural response. The anger over the abuse of (the public's) trust and ecological resources was expressed not only by the strict prison sentences, but also in the judge's comments during trial. The application of Article 115 in Hu Wen Biao's case, as well as the ten year sentence for Hehai's bribery scandal exemplify two instances in which the legal system struck harshly to demonstrate their intolerance for environmental harms, especially ones that created a state of emergency⁶.

The second purpose for the harsh environmental criminal laws in China was to provide the ultimate deterrent to chronic violators. The threat of permanent shutdown/revoking of one's operating license or "corporate death" was not as potent in China due to a commonly used trick among unscrupulous company owners: by taking advantage of the regulators' lack of resources, especially in rural areas, and the large size of the country, owners created new companies with different names, often off the books. For example, a dyes and plastics chemical plant was registered as the Jingjiang Yangtze River Chemical Co., Ltd. until it was shutdown in 2009, but in 2011 it reappeared as the Lianyungang Changjiang Chemical Co., Ltd. This "rebrand" allows them to operate with little regard to following environmental regulations. If caught again, the

⁶ Both cases involved actions that resulted in contamination of the water supply for more than one city/township in Jiangsu province.

process would start over in a different jurisdictional area, or in the same area after an extended period of time so as to elude recognition from authorities. Furthermore, any deterrent effect of shutting down an industrial site as punishment of an environmental crime was reduced by the lack of publicity of this occurrence in the local news media. Oddly enough, while China has become adept in using multiple media platforms to disseminate its environmental regulations and initiatives, there has been minimal reporting on the consequences faced by offending companies. Significantly large incidents (like the phenol spill by the Biaoxin Chemical Co. contaminating the water supply for 200,000 residents) are exceptions. Though the laws reveal the severity needed for effective deterrence, the celerity and certainty can only be demonstrated to potential offenders through public reporting of what punishment a violating company executive received. In this study's case sample, besides the Hu Wenbiao case, only *The People's Procuratorate of Liuhe County v. Rong xin Chemical Co., Ltd.* received much attention after the trial was over. The released judgment summary of the Rong xin case directly commented on the case's public exposure:

公开宣判后，代表们和在场媒体都表示此次宣判活动给犯罪分子沉重的打击，起到了良好的威慑效果。

Following public sentencing, delegates and media at the scene indicated that this live sentencing dealt a heavy blow to criminals, playing a good deterrent effect.

If sentencing being streamed live to the public is considered a way to bolster deterrence, would this become a normalized occurrence within China's legal system? It is possible that the live sentencing provided in the Rong xin case was a special circumstance as it was one of the cases

that fell under the strike hard campaign against corruption initiated in 2009. The Bo Xilai case purported to be part of the most recent crackdown on (state) corruption⁷ was also live streamed.

The deterrent effect of the punitive model has been questioned by white-collar criminologists (Gustafson, 2007; Geis & DiMento, 2002; Brickey, 1997; Simpson & Koper, 1992). In Western countries, those who had been prosecuted and sentenced to ten or more years in prison, ended up being released after just a few years, thus, undermining any potency to this criminal punishment (Gustafson, 2007; Dutcher, 2005). Biases against small businesses or poorer offenders were also observed, which is also an existing issue in China's legal system especially in environmental cases (Stern, 2014; McConville, 2011; van Rooij, 2006; Brickey, 1997). The leniency shown by judges towards the poorer offenders, such as farmers, helps alleviate this issue, but does not address the issue of bias in arrests and prosecutions (McConville, 2011). Lastly, punitive regulation can foster distrust between corporations and regulators, weakening an important partnership for China (Simpson in Laufer & Geis, 2002). The Chinese government choosing to improve and form various aspects of environmental regulation is a wise move, as it allows for the state the flexibility to regulate corporate offenders, so that the weaknesses of one type of model (cooperative or punitive) is compensated by strategies informed by the other regulatory model. The following section reviews the responsive regulatory models proposed by Ayres and Briathwaite (1992), and Gunningham and Grabosky's (1998) and discusses how China has begun setting the foundation for its own form of responsive regulation for environmental protection.

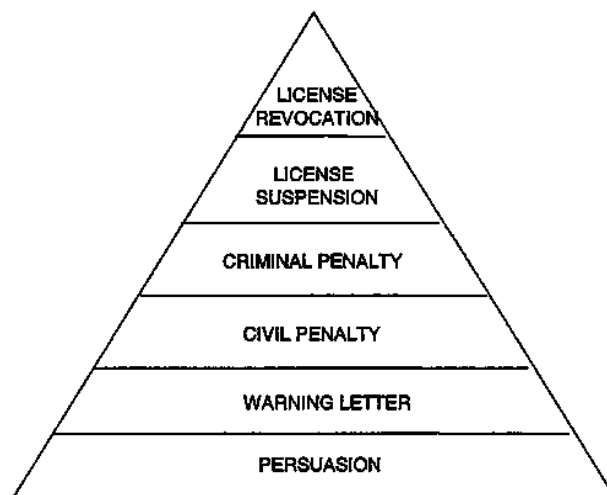
Responsive Regulation

⁷ There has been some debate that Bo Xilai's case was less about striking down on state corruption, and more an excuse to purge the central party of certain members who were gaining too much power and popularity (Bristow, 2012).

The end of the regulatory development pathway that Western nations experienced in their negotiations with protecting the environment was a responsive regulatory model. Under this model, strategies from both cooperative and punitive models were used in an escalating/de-escalating fashion. Envisioned as a pyramid, Ayres and Braithwaite (1992) proposed a regulatory model that is inherently versatile. The flexibility in their model is ideal for regulating corporate environmental crime, as what exactly constitutes a crime is still under heavy debate.

Using both forms of regulation allowed for greater adaptability to specific circumstances and offenders (Fortney, 2003). The cooperative aspects capture the moral character and rationality of corporate executives and allow for the basis of trust between business leaders and the state to still exist (Parker, 2006). Generally, the punitive aspect is used in later stages of enforcement. As far as environmental regulation is concerned, Braithwaite recommended criminal penalties be saved for the upper echelons of the pyramid. Figure 1 provides an example of how various regulatory strategies could be combined into an escalating model.

Figure 1: Ayres and Braithwaite's sample responsive regulatory pyramid



Source: Ayres, I. & Braithwaite, J. (1992). Responsive regulation: Transcending the deregulation debate. Oxford: Oxford University.

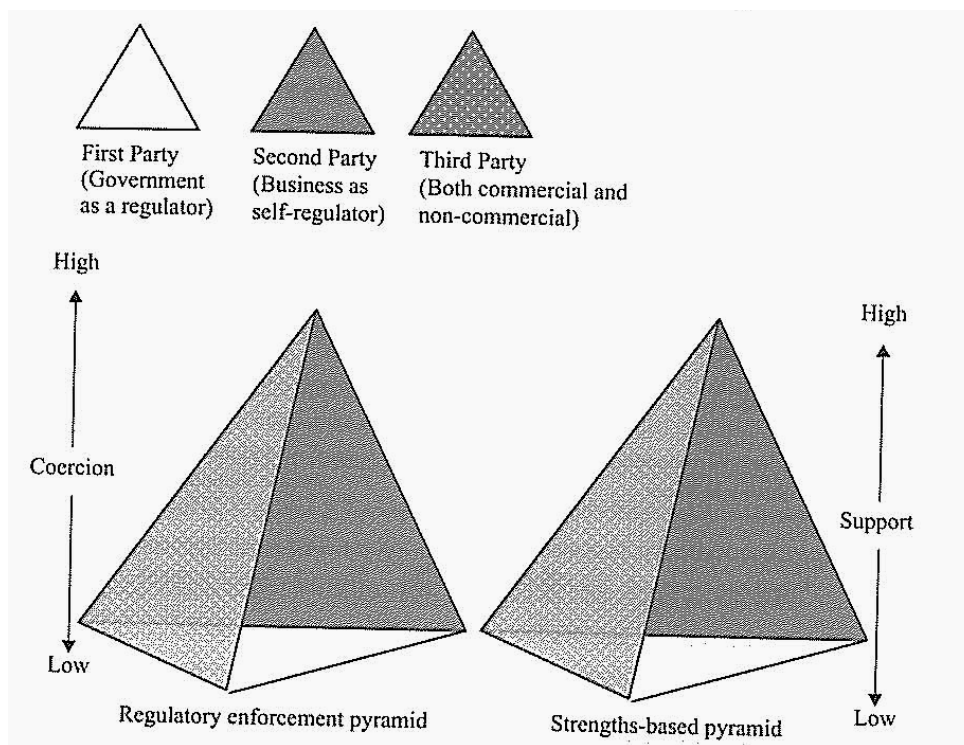
This sample pyramid is appropriate for corporate offenders by beginning with self-regulation and ending with punishments that would prevent them from operating in the future. Within the Chinese context, license suspension is used as an earlier intervention as license revocation does not have the bite it may have in Western countries like Canada or Australia. The latter is due to crafty company owners using a different company name to start up elsewhere after being shutdown. In Ayres and Braithwaite's example regulatory pyramid, each level provides the next step authorities can take with a corporate offender who refuses to comply. All of these responses are state-sanctioned ones. Gunningham and Grabosky (1998), however contend that non-state actors can also implement effective regulatory strategies upon corporate offenders (see Figure 2).

In Figure 2 (on next page), Gunningham and Grabosky's (1998) proposed expansion of the responsive regulatory model is a comprehensive system that incorporates regulation by non-state actors that can work in tandem with state controls⁸. Forming a regulatory tetrahedron, Gunningham and Grabosky introduced the two other pyramid faces to represent escalating regulation by the business itself and a third party (commercial or non-commercial) (Chang, 2012). In their three dimensional representation, Gunningham and Grabosky are able to theorize about the numerous actions the three type of regulators can enact independently or together. This offers greater nuance in the kind of methods used to guide corporate behavior as it includes

⁸ Though in such instrument interaction, the regulatory methods could end up canceling each other out instead of reinforcing each other (Grabosky, 1994).

potential hybrid forms of regulation that could occur in this system⁹. The “second party” face that represents the business as self-regulator highlights the agency of businesses more and acknowledges that there are other internal disciplinary steps a company could conceivably take as supplementary to the state’s response. The “third party” face represents the pressure the public, non-governmental organizations (NGO), and even other businesses (such as within a global supply chain) can enact upon a company to motivate it to comply with national measures (Chang, 2012).

Figure 2: Gunningham and Grabosky’s regulatory tetrahedron

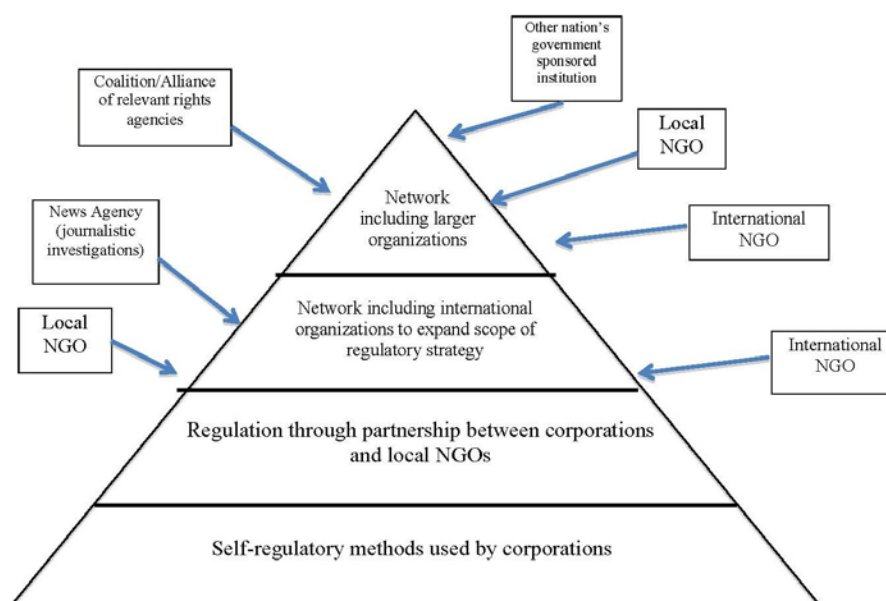


⁹ One example of "a hybrid [regulatory] instrument [is] a prize for the revegetation of former mine sites [that is] jointly awarded by the government and the mining industry" (Grabosky, 1995: 200). This particular tandem method "would be located at the base of the pyramid between government and industry"(Grabosky, 1995: 200). Another example would be "the actions of a bank requiring certification with ISO 14000 as a condition of finance [and] would be represented by a plane located between third party and regulated industry, midway to the apex of the pyramid. A decision of the lending institution to cancel the loan could elevate the plane closer to the apex" (Grabosky, 1995: 200).

Source: Modified depiction of Gunningham and Grabosky's tetrahedron of regulatory pluralism in their 1998 article, "Smart regulation: Designing environmental policy" used from Chang, L. Y. (2012, March). *Responsive regulation and the reporting of information security incidents. Issues & Studies: A social science quarterly on China, Taiwan, and East Asian Affairs*, 48 (1), 85-119.

The role of non-state actors can be important, especially in countries that may have a weak governance structure. Braithwaite (2006) considering how a responsive regulatory system could work in a developing nation with a weak government resulting in the following Figure 3.

Figure 3: Representation of Braithwaite's proposed network-reliant responsive regulatory pyramid for developing nations



Based on example figure provided in Braithwaite, J. (2006). *Responsive regulation and developing economies. World Development*, 34 (5), 884-898.

Figure 3 reveals Braithwaite's hypothesis of developing nations necessarily relying on a large, and ideally international, network for the levels where the state would intervene on an offender's behavior. This type of responsive regulatory pyramid presumes that the nation has little capacity to regulate on its own and would greatly benefit from the support of informal sanctions that non-state actors could provide, such as consumer boycotts, naming and shaming, and strikes to hold corporations accountable. Furthermore, a third party, like an NGO, could act as a check on both the corporation and the state reducing the corruptive influences critics of the cooperative model had warned against (Laufer & Geis, 2002).

While China could benefit from multiple sources providing regulatory support given the capacity constraints on the local environmental protection bureaus, its governmental structure is not so weak that it would need to rely on international organizations to achieve certain outcomes. Granted, Braithwaite purposely based his developing nation responsive regulatory model on an over-generalized form to focus on other actors and forms of regulation providing compensatory forces for any weaknesses in the state. China as a newly-industrialized country (NIC) and major economic power is in a unique position. Though it is still undergoing development, it sees itself on par (or close enough to it) with developed nations in the international community. Through that perspective, China would not be amenable to external parties acting as the primary actors in regulation. The country is open to guidance from other nations, as evidenced from the standards and technologies it has developed over the years, but it ultimately remains in control.

Thus, in its evolution of environmental regulation, China has primarily focused on ways for authorities to ensure compliant and green behavior among corporations. As discussed earlier, China's environmental laws greatly emphasized the concept of a duty to protecting the environment and the security and vitality of society as a whole. This, in turn, informed the

policies and initiatives where the state used both coercive and cooperative methods to encourage corporations to be aware of their impact on the environment.

At a still relatively early stage in its regulatory evolution for environmental protection, the government's strategies acknowledge that much of corporate compliance will be superficial and done for the utilitarian reason of ensuring the company's survival (Expert 1, 2014). By using multiple methods to engender a green outlook including policies indirectly related to corporate environmental performance, China's cultivation of a green conscience among corporations is more than an optimistic hope. Though that consciousness is a long term gambit that requires patience to develop, the use of third parties/non-state actors to help motivate corporations to incorporate green practices in their company missions and goals increases the chance of success in this plan (see Figure 4.1). That success, in turn, would lead to greater self regulation among companies, reducing the need for EPBs to monitor said companies and freeing up regulators to focus on the more problematic areas of environmental crime, such as polluting shadow factories (companies that are not registered).

Figure 4.1 displays what China's environmental regulatory system appears to be thus far. Due to the lack of data regarding non-state actors' interactions in environmental regulation for this study, the proposed diagram only includes possible points of opportunity that non-state actors may be able to prompt or support regulation. These areas of potential influence by non-state actors is informed by brief mentions in the news and ministry press releases of the public's and NGO leaders' involvement in policy consultations and development projects. Other global companies in a Chinese company's supply chain can also push for self-regulation in corporate environmental performance (Wang, 2012; White, 2008).

The main levels of the pyramid shown in Figure 4.1 follow the general pathway of escalation of transitioning from a cooperative regulatory style to a deterrent one as seen in Ayres and Braithwaite's (1992) responsive regulatory pyramid. At the base are self-regulation methods like self-reporting of environmental impact assessments and internal evaluations on operating processes. Local environmental protection bureaus attempt to promote greater use of these measures by companies by providing suggested guidelines to aid in implementation (as listed on the Nanjing EPB and Chongqing EPB websites). At the base of the pyramid, one of the methods used to promote self-regulation is a company having a specialized department in charge of maintaining equipment. This department runs internal tests for the equipment each month; otherwise they will incur monetary penalties deducted from their annual bonuses (Expert 1, 2014). The government's subsidization¹⁰ of monitoring equipment is a promising step forward for motivating enterprises to use environmentally-friendly processes and regulate their own environmental performance (Expert 1, 2014). As the base of the regulatory pyramid, these are the measures that China wants to be the more frequently used. Self-regulation (ideally) minimizes the need for legal intervention and reduces the associated costs.

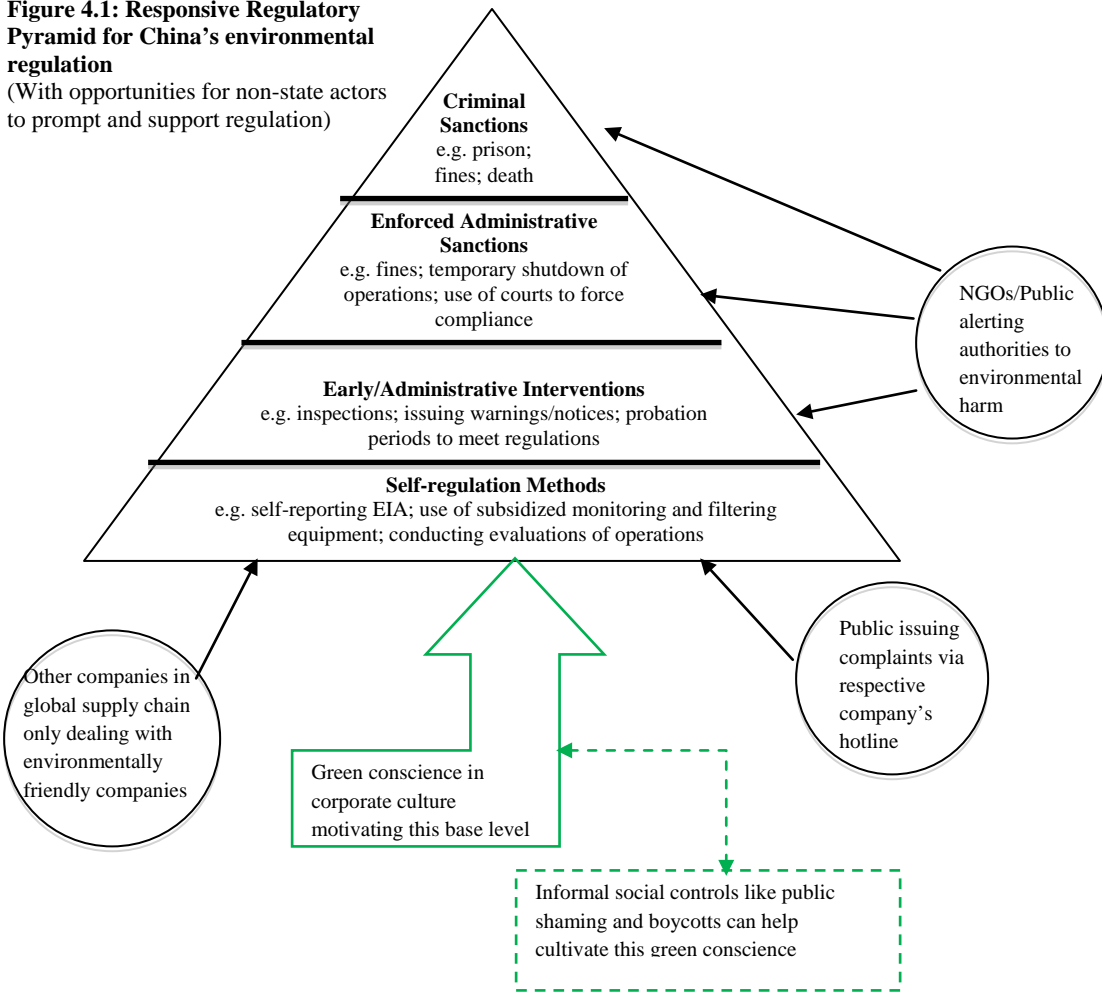
The next level up consists of early interventions intended to provide companies the time to remedy their issues and minimize the harm to the environment during their regular operating processes. One of the civil actions that are used is a criminal law suit¹¹, where the relevant governing authority for a particular incident sues for the costs of cleaning up the incident and replacing whatever faulty equipment caused it, so as to prevent it happening again. These costs

¹⁰Tang's (2014) survey of Hong Kong firms operating in Guangzhou province revealed that environmental equipment is still viewed as more expensive than the fines a company would receive for illicit pollution. Future studies into China's regulatory measures of corporate environmental performance can see if the subsidization differs between provinces.

¹¹ Though not a focus of this dissertation, studies by van Rooij and Stern have shown increasing use of public interest litigation against companies aided by the government allowing grassroots groups to represent individuals/victims; there are also administrative litigation cases to discipline "enforcement authorities for negligence in conducting their environmental management or enforcement duties" (van Rooij, 2010: 61).

are also added to criminal fines a defendant may face if prosecuted. For small offenses committed by the corporations, the legal system intervenes with light reproaches of warnings, probationary periods to meet regulations, and issuing inspections.

Figure 4.1: Responsive Regulatory Pyramid for China’s environmental regulation
 (With opportunities for non-state actors to prompt and support regulation)



For companies whose environmental offense resulted in a larger degree of harm (but not to the level defined by the Supreme People’s Court), the third regulatory response level, enforced administrative sanctions, come into play. These companies typically face hefty fines and a temporary shutdown of operation. Chronic violators, especially those who ignore the earlier

notices from the EPB, are taken to court to force their compliance. Continued noncompliance results in permanent shutdown and revoking of operating license. The final level of regulatory response for corporate environmental offenses involves criminal sanctions.

Faure and Zhang (2011) also perceived the beginning of a responsive regulatory system for China's environmental policy. They observed that "administrative and criminal offenses in China are logically connected and that the punishment is graduated from administrative to criminal offenses" (Faure & Zhang, 2011: 10033). As Ayres and Braithwaite (1992) noted, the threat of harsh sanctions are needed for responsive regulation to work. The 2007 criminal law amendments certainly provided the necessary severity in punishments.

For these regulatory measures to work in the long run, however, an awareness of the environmental impact of corporate behavior must be raised. Through the emphatic concept of duty in Chinese law and increasing accountability, China has ensured that potential violators are cognizant of environmental protection being something they need to attend to in the course of their occupation. Shareholders that have the power to dictate certain corporate policies and practices can possibly shape this green conscience. As Expert 1 commented, a company "can't survive if they don't protect [their] surroundings." This view was influenced by the imminency of being shut down should a company fall foul of the inspectors. The state also further persuades self regulation through the use of name and shame methods, as exemplified by Article 35 in regulations concerning the preservation of Tai Hu Lake:

环境保护部门应当将排污单位及其排污口的位置、数量和排污情况向社会公布，方便社会监督。新闻媒体、社会团体以及其他社会组织、公民可以对排污单位的排污情况进行监督。

The environmental protection department shall make known to the public the names of the pollutant discharging units, the location and quantity of their sewage outlets, and the pollutant discharge status so as to make it convenient for the public to impose supervision. The news media, social groups and other social organizations, and citizens may impose supervision on the pollutant discharge status of the pollutant discharging units. The environmental protection department of a city or county (city, district) in the Taihu Lake Basin shall publicize on a regular basis the enterprises which, in violation of the provisions of these Regulations, seriously contaminate the water environment.

Not only does the release of violators' names to the public increase transparency, it incorporates non-state actors as a way to intensify corporate accountability and makes violating companies aware of the consequences of their behavior.

For now, China is laying out the groundwork by not only strengthening its environmental regulation through responsive¹² and comprehensive laws, but by building an overall green social infrastructure. This overarching agenda to develop a green society is being introduced through development policies, where maintaining social harmony is translated into “peace building” and “green” structures (MEP, 2011). The MEP and its local EPBs in Jiangsu province have included press releases and projects promoting buildings and site plans that prioritize a clean, green, and open environment. “To encourage conservation and recycling,” water prices are being raised (Economy, 2010: 2). The State Council is also implementing a “restructure of petrochemical

¹² The MEP has the power to implement new regulations/policies so that it can respond to new environmental situations as they crop up. One example is in 2008 when the MEP responded to the hazardous level of air pollution by holding provincial officials responsible for meeting “anti-pollution targets” of “reducing the chemical-oxygen demand” (MEP, 2012; Economy, 2010).

industries” with an ‘optimization of industrial layout’” (Economy, 2010: 2). These plans are paired with education initiatives to teach the public on how to act more green. GO 1 commented on how the best approach to China’s environmental issues is one of patience—patience in introducing new green practices and having the rest of society follow. By advocating for all of society to develop a green conscience, corporations are no longer singled out, but rather asked to be role models and leaders in aiding China in its achievement of a higher form of modernization—an industrialized society with a sustainable environment.

In line with this envisioned green society, China’s penalties for environmental violations include the cost for cleaning up the contamination and implementing any required equipment to ensure the prevention and control of pollution. Legislation regarding the protection of Tai Hu Lake specified this in Article 30:

直接向水体排放污染物的企业事业单位和个体工商户，应当按照排放水污染物的种类、数量和排污费征收标准缴纳排污费。对超过排放标准排放水污染物的，环境保护部门除按照本条例第六十条的规定给予处罚外，并按照超过排放标准的倍数计征排污费。排污费应当用于污染的防治，不得挪作他用。

The enterprise, institution, and individual industrial and commercial household which discharges pollutants to the water body directly shall pay the pollutant discharge fee according to the variety and quantity of the water pollutants it discharges and the standards for levying pollutant discharge fees. For those who discharge water pollutants in excess of the discharging standards, the environmental protection department shall, in addition to imposing on them a fine according to the provisions in Article 60 of these

Regulations, count and levy the pollutant discharge fee based on the multiples of the discharging standard. The pollutant discharge fee shall be used for prevention and control of pollution, and may not be appropriated for other purpose.

The environmental regulatory infrastructure China is building involves multiple departments. The Ministry of Environmental Protection and its local branches (the EPBs) are the central authority for environmental matters, but the specific circumstances of a given incident may include the specialty of another department, such as the city management department when there is contamination of a municipal water supply (GO 1, 2014). This is due to the EPB not having a specific department focused on water environmental protection, requiring the bureau to communicate with other departments that may have jurisdiction in a particular case, such as the Maritime Safety Association (GO 1, 2014). By sharing (and thus, diffusing) the responsibility of a particular case among many different departments, the overall response to an event gets slowed down. This is due to each department having their own specific procedures before they can allow another department to initiate their process. Additionally, these different protocols may conflict with each other (GO 1, 2014). GO 1 thinks that consolidating these various smaller departments into one main department with local bureaus would be better. GO 1's suggestion to consolidate may be the needed change in the infrastructure as it would grant other bureaus "the authority to enforce any change in the companies causing the problem¹³" (Wang, 2009: 1).

The support between departments GO 1 hopes for can be seen between the courts and environmental protection bureaus. In *The People's Procuratorate of Nantong v. Nantong Huan Jie Energy Co., Ltd.* case, the EPB sought the court's help in forcing a persistently noncompliant

¹³ Wang observed that though "the health bureau had the authority to monitor drinking water sources, if [it] discovered a problem it could only report it to the local health bureau and government" (Wang, 2009: 1)

company to obey. That interaction between the courts and EPBs is quite common reflecting the positive relationship between law enforcement and judges that McConville (2011) discovered (Stern, 2014). The court upholding the decisions of EPBs also bolsters their authority and legitimizes the environmental regulatory system as a whole. The aforementioned comment from the *People v. Rudong New Energy Co.* judgment also exemplifies the courts attempts to help increase the legitimacy of the whole system. Not only are judges supporting actions by EPBs currently established in urban areas, but are also recommending guidelines for environmental regulation in rural townships. As part of the guidance to be shared with rural areas, the SPC interpretation that set a low threshold for what constitutes an environmental harm is particularly significant. The thorough list of damage scenarios provided in that interpretation makes it much easier for regulators to implement the law, and for corporations to follow the law.

Figure 4.2: How China’s environmental regulatory infrastructure appears to operate

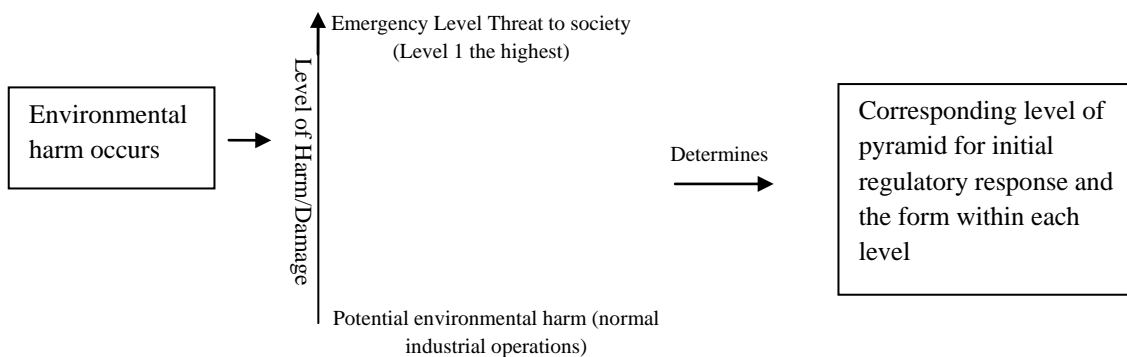


Figure 4.2 displays how China’s environmental regulatory system is not a simple escalation along the pyramid, but is a function of the measured harm caused by an incident. This measure of harm ranges from a baseline of the potential harm a company’s normal operations pose to the

environment to an emergency level along the lines of the Biaoxin chemical company spill. The starting place of a regulatory response to an environmental incident depends on where along this spectrum the amount of damage incurred lies.

While a helpful tactic for the current environmental regulatory system, it places authorities in a primarily reactive position. Through encouraging that green conscience and introducing preemptive policies, China may be able to move from working at only an acute level. A green corporate culture would hopefully beget greater (and proper) self-regulation, freeing up regulators to address aggregate-level issues that with current capacity issues, EPBs cannot (Tang, 2014). EPBs “are often understaffed and their employees underpaid, [resulting in] about 25% [able to carry out the monthly] monitoring of water quality (Economy, 2010).

The basis for a responsive regulatory system appears to be there in China’s environmental protection policies. It has potential to work in the long term, especially if China can successfully cultivate in corporations a green conscience, and they become partners, not only in economic growth and industrial development, but also in the restoring and maintaining the sustainability of the environment. This would aid in the credibility problem that Tang (2014) argues prevents environmental regulators from successfully securing compliance from corporations¹⁴. With the courts releasing more cases, there will be greater data for future studies to investigate deterrent effects, compliance rates, and whether there is a marked difference between domestic and foreign-owned companies.

Another issue that must be addressed is the cyclical crackdowns conducted by the State Council. During a given strike hard campaign, the main motivation is to deter violators, but it lasts for a brief period only and typically goes after "easier" cases (McConville, 2011). Would

¹⁴ Tang’s study focused on only foreign-owned companies, so it is unclear if the credibility issue he asserts is also applicable to domestic Chinese companies.

the drastic form of law enforcement during these periods be detrimental to the long term effect of laying out responsive regulation? The follow up periods to crackdowns must be studied in-depth on to see if the signaled end of a strike hard campaign emboldens potential violators to commit environmental crimes.

Finally, future studies may be able to identify the role non-state actors can truly play in China's environmental regulatory system. There have been promising steps to involve the public and NGOs at consultation meetings. The following chapter discusses this further, as well as how international institutions can also influence China's environmental regulation.

CHAPTER SEVEN

Support in Waiting: The current state and potential of non-state actors' role(s) in environmental regulation

The need to protect the environment originated in grassroots movements. Public outcry over their governments allowing developers to lay waste to their surrounding environment urged official recognition that regulation was needed (White, 2010; Burns & Lynch, 2004; Clifford & Edwards, 1998; Hedman, 1990). The application of criminal law was also precipitated by activism in the wake of severe disasters such as Love Canal and Three Mile Island (Rosoff, Pontell & Tillman, 2007; Gustafson, 2007; Burns & Lynch, 2004; Cable & Benson, 1993). The well-publicized devastation entailing deaths, serious illnesses, and property damage made it plainly clear how dangerous environmental crime could be for society. Mobilized by such loss, the public demanded strict penalties against those who instigated such wanton destruction. No longer mere fines and toothless condemnations, environmental offenses now led to lengthy prison sentences (Uhlmann, 2009; Gustafson, 2007; Reitze, Jr., 2003; Brickey, 1997). While most prominent in the United States, this response was also seen in Canada, Germany, Sweden, Austria, and Spain (DiMento, 1993).

As China's industrialization occurred decades after Western nations, it was able to benefit from those international experiences. China's formal acknowledgment of the environment as a legally protected entity followed its delegation's participation in the 1978 Intergovernmental Conference on Environmental Education in Paris (Wang, 2007; van Rooij, 2006). But as the previous chapters have shown, China's instatement of concrete measures to tackle its environmental issues have been a slow and drawn out process. Complaints issued by

residents fell on mostly deaf ears through the 1980s and 1990s (Stern, 2014; Wang, A., 2007; Wang, C., 2007; van Rooij; 2006; Ross & Silk, 1985).

In the new millennium, however, intensifying criticism from the Chinese citizenry and the global community compelled China to take strong action against environmental crime and pollution in general. In the run-up to host the Olympic Games in 2008, China found itself heavily scrutinized by other nations concerned about sending their top athletes to a country with a hazardous environment. China did manage to provide cleaner air and clear, blue skies during the Summer Olympics but only through the use of drastic measures such as shooting into the clouds to induce rain and shutting all factories in a 50-mile radius of Beijing. The strategies and their desired effect were temporary (Beyer, 2006). Upon the completion of the Games, the factories resumed operation and quickly brought back the toxic shroud over the capital city.

The pronounced visibility of China's poor ecological health continued to draw concern domestically and internationally. Around this time, the Chinese government bolstered its environmental regulation by granting ministerial authority to the primary environmental agency and amending the criminal law to clarify standards and increase punishment severity. Though these improved laws were impressive on paper, there still remain, even to this day, obstacles to enforcing them effectively (Tang, 2014; Wang, 2013). Organizing environmental regulation into a responsive model with emphasis on engendering self-regulation among businesses has potential to aid regulators in overcoming these obstacles. Achieving this will take time, especially with China's focus on penetrating corporate culture to cultivate a sense of responsibility to the environment so that the motivation to self-regulate their environmental performance becomes internalized. As Gibbs (2012) noted, there is a social aspect to business that leads to companies facing a moral quandary of determining the priority of "competing goals

(e.g. profitability versus environmental safety)” (350). Before that green conscience can become entwined with the moral core behind a corporation’s mission statement, achieving compliance from a given company will likely be influenced by instrumental or utilitarian reasons (Gibbs, 2012). Those reasons can be supplied through non-state actors, such as commercial entities, non-governmental organizations, and the general public. Within the overall foundation of the environmental regulatory infrastructure China has set up, there are possible opportunities for non-state actors to interact with businesses that would prompt or support the regulation of their environmental performance.

This chapter discusses these opportunities through examples that have been alluded to by those interviewed for this study and in news media. The data did not yield a conclusive image of how non-state actors could contribute to China’s legal response to environmental crime, so this chapter will be more speculative and also draw from examples in other areas of China besides Jiangsu province. As this chapter will discuss below, non-governmental organizations and the Chinese public have begun to have greater input into official policy discussions on environmental regulation. If that trend continues, future researchers may be able to investigate the extent and impact of non-state contributions in regards to effective environmental regulation. The chapter is organized into the following sections: commercial actors, non-governmental organizations, the general public, and international institutions. For the last section on international institutions, the discussion will center more on the general influences they may be able to exert upon China’s environmental regulatory system.

Commercial actors

Gunningham and Grabosky's (1998) expansion of the responsive regulatory pyramid posed by Ayres and Braithwaite (1992) introduced two different pyramid faces that regarded the potential role of commercial actors in regulating corporations (Chang, 2012). One face focused on those internal to the given company to highlight the different responses a company could take to self-regulate in conjunction with actions taken by the state or other non-state actors, such as an NGO. If a company were to face large administrative sanctions or possibly criminal prosecution, the company could initiate its own internal sanctions by suspending those involved pending investigation. Another strategy would be to issue a press release to keep the lines of communication open with the public so as to maintain whatever trust that remains after an incident.

Starting at the base of the responsive regulatory pyramid, where the state attempts to persuade and incentivize companies to self-regulate, shareholders can influence a company's willingness to self-regulate. As previously mentioned, there are numerous ownership types among the enterprises in China. Much of the variance stems from how many firms decide to partner in a joint venture. Besides the few key industries (e.g. power) that China wants to keep purely state-owned, many prior SOEs have become privatized through joint ventures (Lin & Zhu, 2001; Wang, et al., 2001; Shirley, 1999). In those new partnerships, some of the firms and their shareholders act more as silent partners with little input on the day-to-day operations and decisions. For those that do have a more active role in decision-making, their background may influence their perspective on the extent to which the company should comply with environmental regulations (Fryxell & Lo, 2011).

Many companies in Jiangsu province exist as local branches of a parent company. The parent company could be domestic, such as the China National Petroleum Corporation, or

foreign, such as Apple Inc. As a subsidiary, the local branches must follow any mandates dictated by the parent company to continue receiving funding support (especially for new equipment) (Expert 1, 2014).

Within a specific industry, companies may feel communal pressure to comply with certain practices. Rees (1996) depicts this form of self-regulation within the nuclear power industry in the aftermath of Three Mile Island. After such a catastrophe, the whole industry becomes hyper-aware of the consequences of improper practices, especially for the survival of the industry itself. Seeping into the industrial culture/consciousness, individual firms become beholden to each other (or as Rees puts it— “hostages of each other”) to make operational decisions that would avoid a repeat of a disaster like Three Mile Island or Chernobyl. The strength of this communitarian regulation within an industry depends on how “well-defined industrial morality” is and that morality is “backed by enough [and consistent] communal pressure to institutionalize responsibility among its members” (Rees, 1996: 67). Without it, the actions taken by industry members are little “more than ‘faint symbolic activity’” (Fisse and Braithwaite in Rees, 1996: 4). For the Chinese government’s cultivation of a green consciousness among industrial firms in the country, this communal mechanism could help the developed value to perdure after the state has ceased its coercive actions.

Companies can also receive pressure from commercial partners to adhere to more green standards of operation. Through a global supply chain, a large retailer overseas can greatly influence a company in China to utilize more environmentally-friendly practices (Wang, 2012). Vandenberg (2007) explicates such an exchange with the example of Wal-Mart “specify[ing] the nature of a product and its production, [such as] requir[ing] the product be independently certified” and that it complies with all of their personal requirements (Grabosky, 2011: 126).

Though some companies in China may choose to sell to a company without such stringent demands, urging from external parties “to promote a global green supply chain” can put added pressure on a company to improve their environmental performance. The chemical industry, specifically, has the Responsible Care program, which is a "global initiative [to] improve in health, safety and environmental performance [and maintain] open and transparent communication with stakeholders" (ICCA, 2014). For firms within the industry that are considered “upstream¹,” buyer pressure may not be that pronounced and so this program can help provide the pressure to conform to environmentally-friendly practices. While formed by manufacturers and producers in the chemical industry, the Responsible Care program benefits from collaborations with the government and local community groups. Currently, there is a coalition of NGOs engaging industries in China similarly to the ICCA's Responsible Care program. Known as the Green Choice Alliance, it focuses on advocating “global green supply chains” through the use of “environmentally-friendly suppliers” (IPE, 2010). One of China’s more prominent environmental NGOs, the Institute of Public and Environmental Affairs² (IPE), is part of this group and campaign. The following section discusses the role of non-governmental organizations further.

Non-governmental organizations

The aforementioned Green Choice Alliance (GCA) exemplifies the importance a third party like a non-governmental organization can have in persuading corporations to self-regulate

¹ According to the online business dictionary, upstream is used to refer to industrial firms that process raw material(s) into an intermediary product that can be converted into a finished product by another industry, such as how crude oil is refined for manufacturing plastic.

² Founded by well-known environmental activist, Ma Jun. The IPE provides air and water pollution maps linked to the government’s databases to aid China in disseminating information regarding the country’s environmental issues to the public (IPE, 2010).

and improve their environmental performance. The number of environmental NGOs in China is growing, with more than 3,500 registered³ with the government (GO 1, 2014; Liu, Zhao, Xiong & Gong, 2012). The registration of NGOs entails each organization having an official sponsor, which is thought to place these groups in a less confrontational role (Xu, 2008; Stalley & Yang, 2006). Wong (2003) also points out that many NGOs are specifically “established to meet government agency objectives” (17). There are also unregistered NGOs located in universities and rural areas (Liu, et al., 2012), which represent a more grass-roots level of green activism. They are still, however, relatively new and limited in resources to be considered a significant force (Deng⁴ in Liu, et al., 2012).

Despite the potential for NGOs to coordinate campaigns to bring about significant change (as the GCA is attempting to do with their global initiative), they are typically relegated to an educative capacity in China (GO 1, 2014; Xu, 2008). Specifically, NGOs like the Friends of Nature⁵ group, are used by the government to educate the public on existing environmental policy and (state-approved) issues (GO 1, 2014; Xu, 2008). Government official 1 mentioned that these NGO partners of the government often circulate pamphlets and televise service announcements to teach the public on how to act to help maintain a clean environment. Expert 1 also perceived NGOs in a supportive role for the government, remarking that together they can help to “put a lot of pressure” on those who pollute. Expert 1 also made general references to the potential importance the partnership between NGOs and the government has in helping society “clean up for the young/future generations” by increasing the capacity to hold violators accountable and remind everyone of their collective duty to preserve the environment.

³ During Stalley and Yang’s 2006 survey of environmental activism in China there were 2000 NGOs registered.

⁴ Deng is the director of the NGO Research Center in Tsinghua University.

⁵ One of the oldest environmental NGOs in China.

The partnership between NGOs and the government is growing. According to Expert 3, NGOs are becoming more and more involved in the legislative process. For instance, when drafting the “proposal [for the] Beijing Air Pollution Control Regulations, [the government] had a session inviting consultation [from] NGOs” (Expert 3, 2014). This was not the only policy consultation meeting in which leaders of NGOs have been able to participate. In 2013, “city, provincial and central government officials, business leaders, and NGO representatives met in Beijing...to discuss... efforts to promote environmental transparency and public disclosure of pollution data” (Finamore, 2013: 1). Within that meeting, data from the Pollution Information Transparency Index (PITI) greatly informed the conversation as it displayed what level of improvements have been achieved up to that point in each city. The PITI was created from collaboration between NGOs and the National Resources Defense Council to measure the environmental performance of each city in terms of its disclosed environmental impact assessments, records of environmental violations, and release of emissions data” (Finamore, 2013: 1).

In its fourth annual report, the PITI revealed that a number of cities had declined in their ability to meet environmental targets and in providing thorough records (Finamore, 2013; Wang, 2012). Despite its use to stimulate discussion on where China can improve in terms of ensuring compliance among businesses, Wang (2012) points out the weakness in the PITI is that it does not capture the small deceptions cities may commit to meet a given target leading the results to be artificially inflated. For example, some cities have enforced blackouts within a few days of a target’s deadline to keep energy consumption records within acceptable limits, affecting even schools and hospitals (Wang, 2012). Wang’s point highlights the importance of NGO leaders and other non-state actors, such as the general public, being able to provide detailed input to the

government so that environmental regulations can be truly responsive. Expert 3 remarks that the “trend” of garnering guidance from NGOs for environmental policy is a positive step forward, and hopes it will continue in future legislative discussions.

A number of environmental activists/NGO leaders are legal scholars, as well⁶. That background allows them the ability to give informed opinions to the government on matters of environmental policy. Their legal knowledge (and for some, the status of being active lawyers) enables them to also represent individual citizens who would otherwise be unable to seek legal remedies for an environmental harm. Wang Canfa is particularly renowned in China as an environmental advocate, where in addition to his numerous articles evaluating China’s environmental regulatory policy and enforcement, he founded a legal clinic to aid victims of environmental harms receive the appropriate reparations.

After administrative sanctions, civil litigation cases have been the next most common legal responses to acts of environmental damage. Increased awareness among the populace about the impact of pollution on their health and well-being has led to a marked uptick in public interest litigation against companies in the new millennium (van Rooij, 2010). The burden of proof lies on the plaintiff, however, and given that many of them are residents and/or small business owners, it is exceedingly difficult for them to prove that a company was the sole cause of the alleged damages (Stern, 2014; Wang, 2012; van Rooij, 2010). Lack of financial resources, as well as the expertise to procure adequate evidence makes seeking compensation via a lawsuit a major challenge for individuals. In the past, one group was able to represent individuals: the All-China Environmental Federation (ACEF) (Shieber, 2009). After public consultation, the

⁶ The researcher discovered this during the process of recruiting interview subjects, but that knowledge is not attributable to any of the five participants interviewed for this study.

latest amendment to China's environmental protection law⁷ broadened the right to represent individuals in a PIL case to other NGOs, albeit with conditions (Yang, 2014). Only "300 green NGOs... registered at the city level [that have not] breached any laws or regulations [over] the past five years" are afforded the ability to bring a public interest lawsuit against a company (Yang, 2014: 1).

Despite this limitation, NGOs have found other ways to aid in environmental regulation. A Quzhou lawyer, named Dong Zheng, conducted his own investigations of illicit pollution, but would quietly alert the offending company and/or authorities so as not to embarrass either institution while attempting to stop the discovered environmental harm (Wu, 2013). His endeavors soon expanded with the aid of 30 other volunteers (consisting of "lawyers, students, taxi drivers and salesmen") (Wu, 2013: 1). After four years of cooperation with local authorities and companies in alerting them to any toxic charges in the river, they officially joined the Qingyuan Action for Water Protection project in 2011 as river monitors. This project, started by the Alibaba group, is a joint effort between the company, local NGOs, and the provincial government to investigate pollution sources.

The following section discusses the public interaction in regulating corporate environmental behavior and shows that not all efforts to alerting companies and authorities to environmental crimes are so congenial.

The Public

As with the government, the Chinese public only gradually became more aware of environmental issues and their impact on health and livelihoods. In the late 1990s to mid-2000s,

⁷ Passed in March of 2014, this amendment "will come into effect in 2015" (Yang, 2014: 1).

a number of scholars attempted to survey the Chinese public on their attitudes and awareness of environmental issues. Wong (2003) and Stalley and Yang (2006) both conducted their survey with Beijing university students, as these students represented a diverse cross-section of the country. Moreover, students have played a historically important role as activists. Stalley and Yang's (2006) survey revealed an overall optimistic view on the environment improving in quality over the next five years. It is possible this survey was biased by the fact that it was conducted in the few years leading up to the 2008 Olympic games, when at the time the government appeared to be taking strong measures to reduce pollution. Lo and Leung (2000) also surveyed residents of Guangzhou, where the municipal government had implemented a local environmental protection bureau at that time.

Among all three surveys, there was a general acknowledgment by participants of all visible pollution issues as severe and urgent, for example: unbreathable air, unpotable water, and desertification of arable land. Interestingly, the forms of pollution that are generally hidden (barring an industrial explosion or major spill), such as chemical and nuclear pollution, were not deemed urgent issues. These responses suggest a lack of knowledge regarding the contributing impact chemical and nuclear pollution can have on general air and water pollution issues, as well as the specific health hazards they pose. Recent protests, however, suggests that the public is becoming aware of the illicit behavior by corporations and are no longer willing to tolerate the continued destruction of their communities.

Much like Western nations such as the United States, Canada, Spain, Austria, etc. have experienced, China has been inundated with protests against the deterioration of its environment (DiMento, 1993). Many of these protests have been localized to the specific site contributing to the toxic pollutants, such as two protests in Hunan province outside the Wugang Manganese

Smelting Plant that led to the lead poisoning of 1,354 children in four nearby villages (BBC, 2009). The protests drew the attention of authorities who discovered the plant had been “operating... without approval [of] the local EPB” and, consequently, shut it down (BBC, 2009: 1). Chinese citizens have also protested proposed sites of construction projects of chemical factories knowing the hazard their emissions/discharges would pose for their neighborhood. The paraxylene (or “PX”) protests in Dalian and Xiamen (Beach, 2013) are two notable examples.

Generally, protests are not tolerated in China with law enforcement quickly shutting down any demonstration with tear gas and arrests. For environmental protests, however, there is an interesting dichotomy that has appeared among the types of demonstrations held throughout the country. In the rural areas, protests held by farmers and villagers take the more familiar form of violent outbursts in direct response to an injustice/harm. Damage to the resources their livelihood depend on (i.e. farmland, livestock, fish population), as well as the toll on their health compel these agrarian denizens to storm the offending factory or plant. Despite what they have suffered, their agitated state is perceived as a threat to the country’s security and social harmony leading to many of these protestors to be arrested⁸. In urban areas, however, a new form of protest has arisen. Known as “strolls,” these protests are peaceful and technically lawful with residents walking back and forth on a crosswalk when the light is green (Watts, 2008). The primary purpose of these “strolls” is to express the public’s right to be consulted on proposed construction projects (Wasserstrom, 2009). Under this format, law enforcement has had no cause to arrest these protestors.

Both types of protests have been used against a future development project, but with drastically different results. In Haimen, Guangdong “30,000 people rebelled against plans for a

⁸ Once again, exemplifying the cultural ideology that each person in society is responsible for maintaining the social harmony, and no matter the reason behind these protests they are liable for that act.

new coal-fired power plant they believ[ed would] add to the unhealthy pollution from one already” in operation (Ward, 2011: 1; Kolo & Zhang, 2012). A quite riotous protest, villagers marching outside a government building were tear gassed and many detained for days. After a week of deliberation, the government did suspend expansion plans for the coal plan. This suspension was temporary as two new units of the coal plant were built by 2013. In the city of Xiamen, 8,000-10,000 people walked through the streets to protest the construction of a PX factory across from the downtown area (Cody, 2007). Coordinated through cell-phone text messaging, these urban residents displayed signs warning fellow citizens of the dangers a PX factory would pose to their well-being. For the most part, this protest was performed peacefully and did not result in arrests. It also led to the project being halted until more environmental impact studies could be done. The following year, the proposed factory site was moved inland away from Xiamen (Blount, 2011).

The contrast between the two types of protests and subsequent response by authorities suggests a dichotomy where urban residents are prioritized over those dwelling in rural areas, essentially rendering the agrarian inhabitants “invisible.” Though urban “strollers” avoid arrest by technically staying within legal limits during their protests, some peaceful protests have resulted in a handful of detainments (Wasserstrom, 2009; Wong, 2008). The fundamental difference, demonstrated by the more permanent solution to the Xiamen protest, is that there is a greater consideration of complaints issued by urban residents over rural ones. It is possible that the exposure to higher standards of living provides urban residents with more knowledge and sophistication in their requests to be consulted on planning projects for their community.

Furthermore, the experience of modern life has made urbanites technologically savvy, aiding their campaigns to protect the quality of living in their city and gain national support. In

the Xiamen protest, text messages played a crucial role in coordinating such a large number of people. This was also the case for the remonstrance against the Maglev train project in Shanghai (Wasserstrom, 2009). A protest held in Chengdu also utilized texting, as well as websites and blogs to spread the word (Wong, 2008).

The use of online social media has allowed the public to play a significant role in increasing awareness of environmental issues. In China, the most popular social platform is Weibo (often dubbed “Chinese Twitter”) for the citizenry to post pictures of environmental harms. In 2013, a micro-blogged picture of a factory in Shandong province using high-pressure injection wells to dispose of toxic wastewater underground “prompted an online campaign to uncover pollution scandals” (Li, 2013: 6). The photographic evidence uploaded and reposted from 50,000 microbloggers compelled journalists and lawyers to investigate and drew the attention of some members from the NPC and Chinese People’s Political Consultative Conference. It was noted that “the toxic sewage could seep into aquifers and contaminate groundwater systems [making] it... almost impossible to locate the pollutants, let alone remove or treat them” (Li, 2013: 6). Evidently it was too late to prevent the Shandong factory’s waste, but these microbloggers have increased awareness of such clandestine acts. This may lead authorities and the public to be more vigilant against corporate environmental crime. If this campaign is continued, microbloggers could act as a warning system by catching delinquent companies before the toxic chemicals can seep into the groundwater (Li, 2013).

Expert 2 also highlighted the great potential non-state actors can have to influence environmental regulation by “pass[ing] on [their] passion...through [the] netizen community.” Having their dissatisfaction go viral is only the first step. Expert 2 emphasizes that education is key and that the posts illustrating examples of toxic contamination around the country should be

paired with discussion of how this environmental state is not acceptable and what the public can do to help improve the sustainability of the ecosystem. Du Shaozhong, deputy head of the Beijing EPB, also highlights this need to provide the public with “environmental education” so that discussions of environmental protection can be informed and “the public [can be] motivate[ed] to participate [in that protection] more” (“Smog spawns,” 2011).

The government’s response to the public’s considerable use of Weibo to disseminate information of China’s environmental issues was to create official accounts. This provided a more immediate way for the government (e.g. MEP) to respond to public concerns through online post versus the traditional press releases in print media (Wu, 2013). These accounts also allowed authorities to control what information was shared. For example, it released legal documents from the Bo Xi Lai trial with certain information redacted. In addition to these accounts, the government used Orwellian methods such as imposing specific filters that censor phrases/images pertaining to perceived conflicts that could ignite social disharmony (Grabosky, 2011). For example, after a chemical explosion occurred in Nanjing, one of the city’s “most popular newspapers, [the] Yangtze Evening Post, posted a message on its official micro-blog that was later removed: ‘Today, we received a lot of criticism, which was much anticipated. In fact, we originally had prepared nine pages of coverage but it turned out to be what you are seeing now. We are sad, frustrated, and in pain!’” (Chen, 2010: 1). This censorship also affected the “live television coverage by a Jiangsu station [where] a piece of footage that was copied among Chinese blogs” was pulled by a party official (Chen, 2010: 1).

Even with this censorship, the technological platforms utilized by the citizenry aid in providing a grassroots element to environmental regulation. Micro-blogged photos of environmental crimes can be used to publicly shame the violating enterprise. The coordination

through Weibo and text messaging can also be used for other kind of campaigns, such as a boycott against a company's products until they comply with the public's demands.

There are also two official avenues for the public to use to alert companies and the authorities to environmental harms. The first one is via complaint hotlines. The local EPBs and companies themselves host their own complaint hotlines for any member of the public to file a grievance over an observed or experienced environmental harm (Expert 1, 2014). Thus far, the capacity by local bureaus to investigate after receiving a complaint is relatively weak (Tang, 2014; Stern, 2011; van Rooij, Fryxell, Lo & Wang., 2012; Wang, 2007; van Rooij; 2006).

One case analyzed for this study was discovered through public reporting. *The People's Procuratorate of Liuhe County v. Rong xin Chemical Co., Ltd.* case involved Liu Jing Ming (aided by fellow employee, Lin Yu Yong) of the Rong xin Chemical Co., Ltd. accepting bribes from Chang Fu Xu, Pan Lin Chang, and Jian Zhong Yang to dispose chemical wastewater from their respective companies. This was accomplished by secret discharge pipes. Authorities were made aware of this conspiracy from fifteen individuals who worked the night shift close to the illegal dumping site. They first smelled an unusual onion-like odor and rapidly experienced throat pain, chest tightness, and shortness of breath. All were hospitalized for treatment and when the local EPB investigated the site they discovered an excess of illegal discharge of more than 1,600 tons.

The trial was open to the public and the media. The exposure of the proceedings was influenced by the 2009-2010 strike hard campaign against environmental crimes. During such a crackdown the government makes a point to publicize prosecutions as a concerted effort to deter existing and potential violators from committing the particular form of crime. The publicity also provided a direct response to the initial complaints issued by members of the public and gave an

impression that the government acknowledges public fears and dissatisfaction over environmental harms. Though Fisse and Braithwaite (1983) note that adverse publicity is a rather weak constraint on corporate behavior in the long term, it does help to impel legal action.

Another case where authorities were alerted to an environmental crime by members of the public was when “villagers reported that their sheep were dying after drinking water from a pool” (An, 2011). Investigating those claims, law enforcement discovered an illegal waste dumping conspiracy between the Yunnan Luliang Chemical Industry and the Sanli Fuel Co., Ltd. to dispose of untreated chromium waste (An, 2011). The two truck drivers transporting the waste, the deputy general manager of Sanli Fuel Co., Ltd., and the deputy manager and one employee of the Yunnan Luliang Chemical Industry were arrested (An, 2011). Public reporting does not always result in a response for authorities (van Rooij, 2006). Connected with this case of dumping chromium waste, villagers submitted more than 1,000 complaints about the drinking water sources being contaminated as well. Although “Liu Xiaoduan, a researcher from the Chinese Academy of Geological Sciences” pointed out that villagers “could have ingested chromium” by eating plants tainted from “contaminated soil,” authorities only focused on the negative results for chromium content in samples taken from the local water sources (An, 2011: 1). The seventeen cancer deaths from that same village were lamentably not deemed to be evidence of any further contamination either.

Residents have a slightly better chance of being heeded with a company’s (usually a larger enterprise) direct complaint hotline (Expert 1, 2014). Expert 1 described one large company’s set up, which includes both e-mail and phone based hotlines for public to issue complaints. This company also separates the complaints by the type of pollution (i.e. air, water, soil), and often issues responses to the public via press releases (Expert 1, 2014). After a given

complaint is issued, an inspector from the local EPB will come to confirm the grievance and subsequent response (MEP, 2012). It is usually at this point in the process that delays are experienced due to the bureau's capacity issues mentioned earlier in this dissertation. One incident that was successfully resolved was a report of the company emitting high levels of sulfur dioxide two years prior. An administrative officer from the Nanjing EPB came to check the situation and issued a deadline to complete the necessary changes to reduce the levels of sulfur dioxide or face economic penalties and suspension of operations. Before the deadline, inspectors were sent every so often to check that the company was on track to complete improvements in time. The frequent visits were likely due to the company being a larger, registered enterprise for which local EPBs have listed inspection schedules on their websites.

Expert 1 discussed how interactions with urbanites through the complaint hotline revealed how "eager [they are] to improve their environment." This sentiment was also conveyed by a blogger involved in the Chengdu protest, "What Chengdu people demand is very simple," he said. "This is a policy closely related to people's interests, so why was [the policy discussion] not open [for] public [consultation]?" (Wong, 2008: 2).

The question posted by that blogger is an important one to consider for environmental regulatory discussions. Business leaders, NGO representatives, and legal scholars have all contributed to policy discussions in consultation meetings with government officials. But what of the general public? In recent years, China has provided outlets to gain the input of the public on certain environmental laws (Expert 3, 2014). For example, the two recent measures on monitoring and information disclosure of key state-monitored enterprises, and the Beijing air pollution control regulation did integrate public comments in their legislative processes. Expert 3 clarified that the National People's Congress collects comments from the public on their

website for a designated period. “Though there is no detailed information on how comments were accounted for... the effects of public comments in the first and second draft amendment to Environmental Protection Law” can be seen (Expert 3, 2014).

International influences

In addition to the domestic interventions from third parties discussed above, international institutions can also enact influence upon China’s environmental regulatory system. China could certainly benefit from the support of an international organization especially in rural areas where the capacity constrained EPBs require resources. But with an assertive government and having become the world’s largest economy⁹, China is not the “developing nation” pondered by Braithwaite (2006) in his proposed network-based regulatory model. China may not need to strongly rely on outside intervention, but incorporating an expansive network of supporting institutions to its evolving regulatory system for corporate environmental practices could help fortify the system with increased resources and credibility. Furthermore, these connections would also provide other nation’s perspectives on environmental standards that would inform China’s regulatory discussions in regards to the partnerships between foreign and domestic firms in China.

Even with China’s proclamations to be self-reliant in handling its issues, there is precedent within the country of learning from other nations’ ideas to improve its own processes. As previously noted, China’s environmental law, managerial strategies, industrial technology, and regulatory strategies all have their roots in Western models. The base notion of protecting the environment stemmed from an international conference that a Chinese delegation attended.

⁹ This was officially announced by the International Monetary Fund in October 2014 (Bird, 2014).

The special economic zones the country experimented with under Deng Xiao Ping provided locals access to Western ideas, and allowed the country to benefit from that knowledge in its scientific advancements.

International entities did not only provide models for China's quest for modernization, but also criticism that galvanized the nation into seriously addressing its environmental issues. The lead up to China hosting the 2008 Olympic Games was rife with intense scrutiny on its deteriorating environmental quality. Scholarly estimates on the impact China's pollution rates would have on the global ecosystem escalated those concerns (Navarro & Autry, 2011; White, 2008). Broadening the scope of China's environmental issues to the international community further emphasizes the importance of cultivating a social duty to protecting the environment in the course of one's occupation. Greater consideration of the global supply chains that companies in China partake in can provide a clear pathway to encourage companies to self-regulate (e.g. GCA's plan to urge companies to use green suppliers).

The need for non-state actors in regulation

The decentralized nature of China's local environmental protection bureaus have contributed to their capacity issues. Incorporating partnerships with non-state actors to put forth a comprehensive and coordinated effort to regulate companies could help compensate for any weaknesses existing in the current system. Expert 4 encouragingly spoke about non-state actors providing the necessary check on the relationship between the state and organizations to keep corruption at bay. As Economy (2010) noted, "many countries rely on NGOs, the media, and individual citizens to perform this function" (2). The inclusion of a third party in regulatory measures can help limit any favoritism from existing political connections a company may have.

An independent party can also hold local governments responsible for “environmental aggression” demonstrated through their development projects that are decided primarily to achieve economic goals over ensuring a sustainable environment (Damkhi, et al., 2009: 120).

CHAPTER EIGHT

Conclusion: Cultivating leaders for a “green society”

China's drive for modernization has greatly impacted how its environmental regulation has been designed and implemented. The initial four modernizations of strengthening in the areas of industry, technology, defense and agriculture, inspired accelerated development with little thought to the ecological damage. Concerns from abroad and dissatisfaction from the citizenry led the government to incorporate environmental protection in all policies created to advance the country in these four areas. The opposition between goals for development (economic and industrial) and for preserving the environment however, placed the government into a tense balancing act when devising policy, planning projects and its treatment of corporations. Companies, both foreign and domestic have significantly helped China to launch itself as an increasingly formidable economic power. Paradoxically, these same entities were also preventing China from achieving the recognition of being a developed nation due to their excessive pollution.

The alarmingly toxic state of China's ecosystem demanded strict laws against environmental harms and harsh penalties. Among the significantly longer prison sentences that the 2007 amendments to the penal law introduced, the ultimate severe punishments of life in prison and death were also included. Thus far, no environmental crime case has utilized the latter two. Hu Wen Biao, chairman of the Biaoxin Chemical Co. that was responsible for a chemical spill that left 200,000 residents without safe water for three days, was charged with the specific law associated with these penalties, however. That case sparked discussions by both legislators and academics on the direction of China's environmental regulation (Finamore, et al.,

2013; Wang, 2010; Li, 2009). Was Hu's case the beginning of a trend to increasingly punitive responses by the Chinese legal system against environmental transgressions? What role would such a stringent criminal justice response to environmental violations have in China's overall environmental regulatory system? What conception of environmental crime and its perpetrators did these new policies for environmental protection represent?

This study found that the increased severity of punishment introduced through the 2007 criminal amendment was not a singular shift to a primarily criminal model of environmental regulation. Rather, it was one component of numerous steps undertaken by the Chinese government to build a broader environmental regulatory infrastructure. To address its ecological issues, the government realized it had to incorporate the goal of protecting the environment into its agenda for industry development. China's industrialization targets were tempered with policies to help conserve the country's natural resources. Improving the sustainability of those resources takes time, and so, the future orientation noted in this study makes sense. By not only focusing on punishing corporations for a present environmental transgression, but pursuing the building of an overall green society for the country, China avoids completely ostracizing corporations. Taking this a step further, the Chinese government has laid the seeds to cultivate a green consciousness among corporations for long-term success in regulating corporate environmental performance.

This was developed through a narrative of "duty" towards protecting the environment for the benefit of society. Throughout Chinese legislation there is great emphasis to "fulfilling one's duty," not only of what one's occupational position requires but also ensuring the peace and safety of the country. This expectation is also underscored by other sectors of the criminal justice system. During a criminal trial, judges chastise defendants for their failure to perform

their duties, and that their actions could greatly jeopardize the future state of the country. Local branches of the main environmental authority (Ministry of Environmental Protection) have initiated pledge programs for companies to officially acknowledge and commit to the responsibility of utilizing more green operating practices.

From this it became clear that China was framing its environmental regulation in a discourse of duty/responsibility to the environment. In the context of corporate illegal dumping (which this study focused on due to the clearer link of corporations being the cause of the contamination), much of the country's rhetoric used an anthropocentric view of environmental harm. Though there were statements of the specific physical deterioration of the biosphere and its natural resources, the far reaching and long term impact noted was on losses to the community. The minimal standard for criminal liability makes this clear: the Supreme People's Court issued that one (human) death was already too grave a consequence of an environmental crime and should be punished with the full force of the law (SPC, 2013; 2006).

In the vein of that interpretation, the harsh penalties for environmental crimes also acted as a response to the outcry for retributive justice. Proponents of the decision in Hu's case and for the inclusion of the death penalty as a possible consequence of environmental harm certainly conveyed this sentiment with fiery statements calling for the government to strike harshly against environmental violators (Li, 2009). The need for expressive retribution was also shown in the moral indignation from judges calling defendants thoughtless and selfish for their environment violations. But this disapproval was used to shame the offenders rather than to pacify the accusers' need to see the offenders punished. Reflecting the Confucian influences on the current legal system, this shaming provides the first step for offenders to accept that their behavior was wrong and learn from this mistake on how to act in a conscientious and legal manner. Such

shaming initiated another process for developing a green consciousness. Common to Confucian times, and seen in Western settings as reintegrative shaming, offenders are shown the error of their ways. Once offenders accept and rectify their mistake (i.e. carry out their sentence) they are then welcomed back to society as contributing members again. For corporate environmental crimes, the corporate individual learns that certain decisions and operation processes have devastating consequences for the environment and society (present and future). Both willful and negligent acts that result in damage to natural resources were criminally liable. The inclusion of environmental harm caused by negligence represents the emphasis China's legal system has on offenders failing to fulfill their duty. Punishment of those who unintentionally defiled ecological resources affirms the notion that everyone in society has the responsibility to ensure the safety and harmony of the country, which includes maintaining the sustainability of the environment.

Large threats, like the 2009 chemical spill in Yancheng, are handled as emergencies and quite swiftly dealt with. Smaller, chronic environmental violations, however, have proven difficult for the legal system to attend. It is the latter form that the government is still developing its regulatory response by experimenting with different regulatory strategies ranging from cooperative to retributive styles. As with the emergency responses, many law enforcement strategies are reactive with only short-term impact on protecting the environment. But with the aforementioned pledge programs and education initiatives, the government is developing a long-term plan to turn the nation into a green society.

This study found that in China, the legal system first coaxes this green-friendly mindset through instrumental incentives and coercive strategies. This included tactics such as mandating filtering equipment, inspection schedules, and blacklisting companies with poor environmental performances. The government follows these acts with statements appealing to the moral

/ethical senses of corporate individuals and developing programs to expound on that inherent morality to foster a green-friendly mindset. This was exemplified in the study's discussion of new regulations and programs being gradually implemented by the local EPBs that focus on developing awareness and accountability of corporate contributions to pollution (IPE, 2010). The hope is that as companies incorporate the necessary changes to adhere to regulations posed by their surrounding community, the eco-friendliness becomes part of the corporate mission and practices and ultimately tied to the company's moral base.

In appealing to the moral center of corporate individuals, the Chinese government focused on a characteristic of corporate dynamics familiar to the nation's cultural history: collectivism. The cultural influences of Confucianism and communism were apparent in China's legal responses towards environmental crime and the overall legal infrastructure. Specifically, the collectivist value shared among these two ideologies was used as part of the government's strategy to alter the corporate mindset on how to use natural resources.

The value of prioritizing the group over the individual can be seen in the general internal dynamic of corporations, regardless of national background. White-collar criminologists have acknowledged that corporate crimes (as defined by Clinard & Quinney, 1973) are committed to benefit the company, regardless of individual gain (Frank & Lynch, 1992). Taking advantage of how this sense of loyalty to one's firm motivates the behavior of corporate individuals, the Chinese legal system is attempting to ingrain an obligation to society, and specifically, green practices as part of a corporate individual's occupational duty. Encouraging companies to perceive incorporating environmental practices in their operating processes as part of their occupational duty can aid in implementing a responsive regulatory system for corporate environmental performance. Thus far, collectivism has been discussed in determining corporate

criminal liability (see Fisse & Braithwaite, 1993), but this study suggests that the collectivist element of corporate culture can inform discussions on regulatory strategies. White-collar criminologists and regulatory theorists should consider this factor as an avenue to bolstering existing models of corporate regulation.

This strategy by the government comes out of a necessity to tread carefully with corporations to preserve their existing relationship. China's overall economic growth is inextricably tied to the continued operations of industrial enterprises. With China still striving for greater heights in its economic accomplishments, it cannot afford to ostracize the corporate sector. At the same time, China must attend to the critical environmental issues it is facing. This explains the attempts to negotiate with business leaders and encourage self-regulation. The aim by the government is to guide corporate behavior to become more environmentally-friendly. To promote this green conscience, the Ministry of Environmental Protection (MEP) has devised programs to increase awareness of environmental issues and accountability of companies' discharge practices. Furthermore, central government officials have held consultation meetings with company heads, provincial leaders, NGO representatives and scholars to discuss other strategies for effective reduction of pollution (Finamore, et al., 2013).

Though the state does attempt to encourage use of these cooperative-based methods of regulation, it is increasing its use of criminal legal responses (Jiangsu Province Higher People's Court, 2014; Stern, 2014). Thus far, the components of the legal system: criminal, civil and administrative appear to be separate rather than working in tandem. This is changing, however. Policymakers have started to bridge these three areas to formulate a more comprehensive system. Known as “三合一” sanheyi, this refers to the idea of using a three-pronged approach in official responses. While still in the early stages, implementation has been partially

demonstrated through increased cooperation between the criminal courts and the environmental protection bureaus (EPB). The EPB has used the court for support in enforcing compliance with environmental regulations from an obstinately delinquent company. The court mandate also included the threat of criminal sanctions being pursued if the defendant still refused to adhere to the law. This situation illustrated the initial foundation of China implementing a responsive regulatory system for environmental protection, where criminal sanctions were presented as a last resort measure against the habitual offending company. In that role, the sharp rise in China's punitive measures for environmental violations provides an imposing threat to deter violators. The sign of an effective regulatory system, however, is one that does not staunchly rely on its criminal legal remedies but is able to motivate potential offenders to self-regulate (Braithwaite, 2008; Ayres & Braithwaite, 1992). The policy documents analyzed for this study reveal that this is the direction China is taking its environmental regulation.

The tetrahedron proposed by Gunningham and Grabosky (1998) is a good step forward in thinking how a responsive regulatory structure can work as it acknowledges that there are various types of actors that contribute to controlling the behavior of a specific kind of entity. For corporations this is particularly true, as to be successful they need to have a good reputation with those in their supply chain and among consumers. But, as this study discussed, in a setting like China the government has stricter control over how and when other actors can exert their influence, which would lead to the sides of the hypothetical tetrahedron not being equal. In this case, Braithwaite's proposed network-based responsive regulatory pyramid seems more appropriate in representing the connections of non-state actors in regulation. Braithwaite's proposal, however, is too extreme in its reliance on international entities to supplant any governance structure in regulation. He does preface this by stating that his assumptions were

based on an “ideal” type where the supposed developing nation has such weak governance structure to be essentially considered negligible. For regulatory scholarship, it is important to consider a situation where a developing nation does have a strong state institution. As this study saw from budding interactions between regulators and non-state actors, China can utilize a network of external partners to support building a new regulatory infrastructure as it grapples with defining the parameters of handling a nascent phenomenon like environmental crime. As the government slowly integrates input from the general public and non-governmental organizations, the country’s environmental regulatory system may look like the proposed diagram in Figure 4.1 in the future.

Overall, China’s improvements to its environmental regulations reveal both drastic measures in the short term (such as those taken prior to the Olympics or during strike hard campaigns) and setting up progressive steps for long-term impact. The severe punishments from the 2007 amendment to criminal law exemplify both of these. For the short term, the issuing of lengthy prison sentences and the publicized potential of executing someone for environmental crime makes a strong statement that China is indeed addressing its environmental issues more seriously. The tougher punishment may also help satiate the public’s outrage over what they had suffered due to the (in)actions of the accused. In the long term, (barring crackdown periods) these criminal penalties can act as last resort deterrent within a responsive regulatory structure for corporate environmental performance. But it will be the internalization of a social responsibility towards effective use of natural resources by corporations that can make the biggest difference in China’s environmental regulatory system. Adopting the green consciousness that China’s legal system and environmental regulators have advocated, companies in China would self-regulate more through the use of green operating practices and

reduce the costs and strain on state resources. This long-term strategy is a promising one, and with more data becoming accessible to scholars, future studies will be able to document the extent that potential is achieved.

Future Directions

As an exploratory project seeking to discover how corporate environmental crime was being conceived in China, this study stands as a stepping stone for future studies. Gaining access to data in China is notoriously difficult, especially official documents. For information pertaining to environmental issues, government websites have shown a backlog in releasing those records for public consumption. For example, criminal justice statistics would only be available up to 2005. The shift in the mid-2000s of the Chinese government focusing on implementing policies to address its alarming ecological issues began to improve the dissemination of reports. Courts have begun uploading judgments and statistics to official websites. EPBs have created databases to monitor compliance and pollution emissions among companies.

For this study, these archives were just starting, offering a small sample for analysis. While enough for the purposes of this project, the greater availability of data now offers future researchers a chance to pursue multiple lines of inquiry in regards to the effectiveness of China's environmental regulatory regime. It would also allow for mixed-methods projects that could provide results comparable to other settings. One possible question to pursue: How does the type of corporate ownership (foreign vs. domestic) impact its compliance rate with environmental regulations, and to what extent does it influence the respective company's participation in green

initiatives? Investigations into effective regulatory strategies for other forms of corporate crime could also be conducted—would they be similar to what China has begun to devise for environmental regulation?

Currently, studies of both white-collar crime and green crime have predominantly been situated in Western settings. The cultural and sociopolitical components of those settings are not fully translatable to China. Though Western influences can be seen in contemporary China, primarily due the introduction of capitalist elements under the Open Door policy, the particular characteristics of its rich and tumultuous history and culture must be acknowledged in discussions of how its legal system would define and respond to a novel form of crime. This study contributes a more contextualized analysis of China's legal responses and conceptions so as to combat inherent biases in past studies on China that imposed Western expectations and experiences in their analyses. China's unique cultural setting is of particular interest to the field of criminology, as the amalgamation of its pluralistic values could expand current notions of white-collar and corporate crimes, perpetrators, and how best to reduce their occurrence.

In addition to potentially providing a stepping stone for subsequent studies, this project can contribute to policy discussions. Environmental protection is still a developing area of policy for China. The recent changes are promising, but to instigate a more effective regime the following capacity and compliance issues need to be addressed: local protectionism, lack of resources, and implementation difficulties. Improvements over the last decade to China's law have attended to the latter issue quite a bit. The Supreme People's Court interpretation in particular helped clarify any lingering confusion of when to apply the law (Expert 3, 2014). Even with such elucidation, Tang (2014) criticizes that there is still an arbitrary quality to how law enforcement responds to various violators. What may be represented as flexibility by law

enforcement in response to unique situations may be perceived as inconsistency at best and favoritism at worst.

Local protectionism is still a considerable obstacle to effective enforcement of environmental violations (Expert 2, 2014; Tang, 2014; Stern, 2011; Wang, 2007; van Rooij, 2006). Political connections may prevent an alleged offender from facing any sanctions for their deviance. Those interviewed by Tang (2014; 2012) disclosed that these connections often led to being warned of an upcoming “surprise” inspection and thus, allowing the company to prepare. Though EPBs (in Jiangsu province, at the least) have attempted to not have the same inspector visit a given company each time, the lack of resources impedes the bureau’s ability to have greater manpower (Tang, 2014; Wang, 2012). Thus, the funds announced by the State Council for green development projects needs to be funneled into the local branches of environmental enforcement, as well.

Rural areas are especially vulnerable to these capacity issues. As present urban towns had once experienced, local governance in the countryside prioritizes industrialization over environmental protection. Most of the environmental regulatory infrastructure discussed in this study has been implemented in urban areas. Though some EPBs are intended to also have jurisdiction over rural townships, the lack of resources prevents them from being able to send any officials for inspections or respond to particular incidents. This particular issue must be remedied in China. Once the government has settled on its environmental regulatory infrastructure in its designated experimental cities, it should build the same in the townships and villages of the countryside. As these rural areas are in the early throes of industrial development the green-minded policies are imperative. Implementing a broad and effective regulatory system to protect the environment sooner may prevent further loss of natural resources.

The evolution of China's environmental regulation is clearly still ongoing. The incorporation of strict and punitive punishment signaled a new era for this area of law. Through its policies, amendments and programs, China has altered its modernization plans to account for the need to preserve the environment. The seeds to cultivate a green conscience among its business leaders, as well as the whole of society may work out in the long run if the other areas of green infrastructure China has initiated can help support that mindset. If the country continues in its willingness to increase transparency and communication with not just official actors, but non-state ones as well, China's environmental regulatory system may truly be effective in improving the sustainability of the country's natural resources.

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Table 1 Case Summaries

Trial date Year	Case Name	Court	Defendant Details	Charges	Confessed (Yes/No)	Sentence
2009 (Jan. 26)	The People's Procuratorate of Nantong v. Nantong Huan Jie Energy Co., Ltd.	Nantong Intermediate People's Court	Nantong Huan Jie Energy Co., Ltd.	Violation of Water Pollution Control Law <i>Multiple administrative violations of illegal waste discharge and noncompliance with prior notices</i>	No	Upheld administrative sanctions from EPB, 200,000 yuan fine and cease production
2009 (Feb. 20)	The People's Procuratorate of Yancheng city v. Hu Wenbiao	People's District Court of Yandu (Yancheng)	1) Hu Wenbiao, chairman of Biaoxin Chemical Co. 2) Ding Yuesheng, factory director	Article 115: Endangering the Public through the deliberate spread of poison	No	1) 11 years imprisonment (10 for spread of poison and 1 for tax fraud) 2) 6 years imprisonment
2009 (June 26)	The People's Procuratorate of Funing County, Yancheng City, v. Cui Mou	People's District Court of Funing (Yancheng)	Cui Mou, Supervisor for Jiangsu Province, Yancheng Standard Chemical Co., Ltd.	Article 408: Dereliction of Duty (leading to serious environmental pollution accident)	No	2 years imprisonment
2010 (Jan 21)	Appeal of above case	Yancheng City Intermediate People's Court of Final Appeal	(same as above)	(same as above)	No	Prior verdict upheld

2010 (May)	The People's Procuratorate of Liuhe County v. Rong xin Chemical Co., Ltd.	Liuhe District People's Court	1) Chang Fu Xu (Asst. General Manager) 2) Pan Lin Chung (share holder) 3) Jian Zhong Yang (shareholder) 4) Lou Jing Ming (chemical production asst.) 5) Lin Yu Yong	Article 338: Illegal discharge/dumping/transport of toxic waste Article 383: Non-state bribery	No	Chemical co. fined 5 million yuan 1) 3 ½ years imprisonment, 60,000 yuan fine 2) 3 years imprisonment, 60,000 yuan fine 3-4) 2 ½ years imprisonment, 60,000 yuan fine 5) 2 years imprisonment, 50,000 yuan fine
2010 (June 3)	The People's Procuratorate of Zhengjiang city v. Zhang Bao Lin, et al.	Zhengjiang Intermediate People's Court	1) Zhang Bao Lin, Director of Jiangsu Province EPB 2) Ding Chunsheng, Deputy Secretary of Zhenjiang District EPB	Article 387: Extorting or acceptance of bribes by state/people's institution Article 408: Dereliction of Duty (leading to serious environmental pollution accident)	Yes	1) 5 ½ years imprisonment 2) 1 year probation
2010 (Dec. 13)	The People's Procuratorate of Anyang County v. Hehai	People's Court of Anyang, Anyang City	He Hai, Asst. General Manager of Anyang water supply	Article 385: State functionary takes advance of his position, extorts or accepts bribes	Yes	10 years imprisonment, political rights suspended for 1 year

			corporation			
2010 (unknown)	People v. Rudong New Energy Co.	People's Court of Rudong County	Rudong New Energy Co.	Multiple administrative violations of illegal waste discharge, breach of contract, and noncompliance with prior notices	No	Upheld administrative sanctions; recommendation for institutionalized guidance for rural villages on environmental protection
2011 (Dec. 26)	The People's Procuratorate of Wuxi City v. Jiao Weicheng	Wuxi Intermediate People's Court	Jiao Weicheng, Safety and Quality Asst. in Jiangyin City EPB	Article 387: Extorting or acceptance of bribes by state/people's institution Article 385: State functionary takes advance of his position, extorts or accepts bribes	Yes	6 mo. Imprisonment, 100,000 yuan fine, seizure of illegal gifts
2012 (Feb. 6)	The People's Procuratorate of Changlang District, Suzhou City v. Xu Huojin	Suzhou City, Jiangsu Province Intermediate People's Court	Xu Huojin, Director of Pollution Control Dept.	Article 387: Extorting or acceptance of bribes by state/people's institution	Yes	5 ½ years imprisonment, confiscation of bribery proceeds totaling 125,000 yuan and property valued 65,000 yuan
2012 (Nov. 7)	The People's Procuratorate of Suzhou v. Geng Yuping	Suzhou Intermediate People's Court	Geng Yuping, head of Hefei General Trading Co. Ltd.	Article 154:Smuggling Article 339: Illegal dumping or treating of foreign waste	No	6 ½ years imprisonment, 830,000 yuan fine
2012 (Sept. 17)	The People's Procuratorate of Changzhou	People's Court of Changzhou City	Ni Mou	Article 338: Illegal discharge/dumping/transport of toxic waste	Yes	Fined 1,570,000 yuan to cover the fees to clean

	district v. Jiangyin City Changsheng Chemicals, Ltd.					up the toxic waste
2013 (March)	The People's Procuratorate of Ganzha District v. Ma Yong, et al.	Ganzha District People's Court	1) Ma Yong 2) Huang Ya Chong 3) Xia Xinhau 4) Noritada	Article 343: Unauthorized mining, and damaging resources Violation of Water Pollution Control Law	Yes	1) 3 years, 10 mo. Imprisonment, 100,000 yuan fine 2-4) 3 years, 3 mo., 80,000 yuan fine; assets seized.
2013 (June 26)	The People's Procuratorate of Danyang City v. Yang Weimin	Danyang City People's Court	Yang Weimin, owner of resin barrel cleaning business	Article 338: Illegal discharge/dumping/transport of toxic waste	Yes	1 year imprisonment, 30,000 yuan fine
2013 (July 17)	People v. Yancheng City East wastewater treatment plant	Nanjing Intermediate People's Court	Yancheng City East wastewater treatment plant	Failure to comply with multiple administrative notices and sanctions on implementing the necessary environmentally friendly equipment	No	Administrative penalties upheld, with additional 3% fines for failure to pay
2014 (January)	The People's Procuratorate of Haimen City v. Ye Cheng, et al.	Haimen City People's Court	1) Ye Cheng, co. owner 2) Zhou Kai, driver (accomplice)	Article 338: Illegal discharge/dumping/transport of toxic waste	N/A (caught in the act)	1) 2 years imprisonment, 50,000 yuan fine 2) 1 ½ years imprisonment and 30,000 yuan fine

Appendix 2: Recruitment Script

E-mail template:

Dear (Potential participant's name and title goes here),
My name is Natasha Pushkarna, and I am a doctoral candidate from the University of California, Irvine. I am currently researching China's legal response to corporate environmental crime, particularly its recent shift to a much harsher stance against it. I am analyzing publicly available court opinions and policy reports to understand this response, and am hoping to supplement that analysis with interviews of experts on environmental regulation in China. (Name of person who referred me goes here) suggested you as an expert I could possibly speak with regarding general opinions about the issue. (Will include one brief line on how I know the person who referred me to them here.) He/She sends his/her best regards.

Would you be willing to consent to an interview? The questions will only cover matters of public record, and if you do agree, you may refuse to answer any question and stop the interview at any time. I have attached information about the study and your rights as a participant if you consent to an interview. Please feel free to contact me if you have any questions or concerns.

Many thanks for your attention.

Best regards,

Natasha Pushkarna

In-person script template:

Hello, it is very nice to meet you. My name is Natasha Pushkarna. I am a doctoral candidate at the University of California, Irvine. As (name of person who is personally referring me) mentioned, I am currently working on my dissertation to complete my degree. My study is focused on how China's legal system is responding to corporate environmental crime. I am particularly interested in the recent shift to tougher policies against it. To research this, I am analyzing publicly available court opinions and policy reports, and am hoping to supplement that analysis with interviews of experts on environmental regulation in China. Interviews will only cover matters of public record, and seek your general opinions about corporate environmental crime.

With your background on environmental issues in China, I was hoping to request an interview with you. Your participation is completely voluntary, and you do not have to decide now.

(I will hand study information sheet and my business card at this time.) You can read this for more details regarding the study and what the interview entails. As I note here *(points at sheet)*,



the interview will last 30 to 60 minutes, and in a location of your choosing. You may refuse to answer any question, and stop the interview at any time.

(For potential participants that do not speak English (very well or at all), I will be saying this in Mandarin—the official term for the Chinese language.) If my Chinese is a little difficult to understand, you may bring an interpreter of your choice to the interview.

Do you have any questions for me?

If any questions are asked, I will answer these. If they do make their decision on the spot, the following things may be spoken:

○ *If they say no:* Thank you for your time. It was a pleasure to meet you. Would you be willing to refer me to any of your colleagues who I could possibly request an interview?

○ *If they say yes:* Thank you for consenting to an interview with me. When and where would you like to have it? (I would then proceed to set up and confirm the details with them to conduct the interview.)

If they would like to take some time to read the study information sheet, I will say the following:

That's fine. Take your time. You can take up to a month to let me know whether you would like to participate or not. You can contact me at the provided email address and phone number. Please feel free to send me any questions or concerns you may have.

Thank you for your time. It was a pleasure to meet you.



Appendix 3A: Study Information Sheet (English Version)

University of California, Irvine Study Information Sheet

Getting tough on environmental crime in China- responsive regulation or moral imperative?: A case study of the legal response to corporate environmental crimes in Jiangsu Province

Lead Researcher

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Faculty Sponsor

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- You are being asked to participate in a research study examining China's legal response to corporate environmental crimes. The researcher is interested in understanding the influential factors behind the recent policy shift to a more severe punishment for environmental crimes.
- You are eligible to participate in this study if you are a professional knowledgeable about environmental issues in China.
- The research procedures involve an in-person interview that will last approximately 30-60 minutes at a location convenient for you. Interviews will only be audio-taped with a digital recorder if you consent to it. You are under no obligation to participate in this study or interview. You do not have to answer any questions that you are uncomfortable with and you can stop the interview at any time.
- There is virtually no risk associated with participation in this study. Questions will only refer to policies and events on public record. To ensure maximum comfort and privacy, the researcher has taken the following steps: (a) the interview will be conducted at a location of your choosing, and (b) your identity will not be associated with your responses.
- There are no direct benefits from participation in the study. However, the study's findings may help inform future environmental policy by identifying possible areas of improvement and any factors that would be useful to consider in regulating corporations.
- You will not be compensated for your participation in this research study.
- All research data collected will be stored securely and confidentially in a password protected file on a computer with no network access. Your name and any personal identifiers will not be included in the data. All responses will be quoted in the write-up with only an identification number. If you consent to your interview being recorded, the recording will be transcribed and translated within a month following the interview. The physical recording will be destroyed two years after the interview.
- The research team, and authorized UCI personnel, may have access to your study records to protect your safety and welfare. Any information derived from this research project that personally identifies you will not be voluntarily released or disclosed by these entities without your separate consent, except as specifically required by law.

- If you have any comments, concerns, or questions regarding the conduct of this research please contact the researchers listed at the top of this form.
- Please contact UCI's Office of Research by phone, (949) 824-6662, by e-mail at IRB@research.uci.edu or at 5171 California Avenue, Suite 150, Irvine, CA 92617 if you are unable to reach the researchers listed at the top of the form and have general questions; have concerns or complaints about the research; have questions about your rights as a research subject; or have general comments or suggestions.
- Participation in this interview is completely voluntary. You may refuse to answer any question or withdraw from the study at any time without penalty. Your decision will not affect your relationship with the researcher. Do you have any questions? Do you consent to participate?

Appendix 3B: Study Information Sheet (Chinese Version)

加利福尼亚大学欧文分校 研究信息

中国对环境犯罪严厉的惩罚更强硬- 响应监管或道德性的强制？ 江苏省的企业对环境犯罪的法律反应的个案研究

首席研究员

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学院校监

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- 您是被邀请参与研究审查中国对公司环境犯罪的法律应对. 研究员有兴趣了解环境罪行的惩罚更为严厉, 近期政策转向的背后影响因素。
- 若您对中国的环境问题有专业的理解, 那您就适宜参加。
- 研究过程将会在一个方便您的位置进行, 时间将持续大约 30-60 分钟的面对面访问。如果您同意, 访问将会只用数码音频录音机进行录音。您没有义务参与这项研究或面试。您不必回答任何问题若您觉得不方便, 您可以在任何时间停止接受采访。
- 参与这项相关的研究几乎是没有任何风险的。问题将只是关于政策和公共记录的事件。为确保最大的舒适度和私隐, 研究员已采取以下步骤：
 - (a) 面试将在您选择的一个地点进行和
 - (b) 您的身份将不会与您的响应有所相关联。
- 参与这研究是没有直接的受益。然而, 这项研究的结果可能会帮助告知未来环境政策去确定可能改进的领域及任何有用, 于规管公司的考虑因素。
- 您参与这项研究是没有任何得益的。

- 所有收集到的研究数据将用安全和保密的方式储存于没有网络连接的电脑档案中，档案是用密码保护的。您的姓名和任何个人的标识符都不包括在数据中。所有的回应都只引述于用号码识别的记录中。如果您同意在面谈时进行录制，录制将会在面谈后一个月内被抄写及翻译。这亲身的记录将在面试的两年后被销毁。
- 研究团队和 UCI 经授权的人员，可能使用到您的研究记录，以保护您的安全和福利。在这一研究项目中从您本人取得的任何信息，这些实体未经您单独的同意是不会 被主动发布或披露的，除非法律明确要求。
- 如果您有任何意见，关注的问题或关于进行这项研究的问题请联系研究人员列出在此窗体的顶部。
- 请通过 电话 (949)824-6662 联系研究 UCI 的办公室，或通过电子邮件 IRB@research.uci.edu 或在 5171 加利福尼亚州大道，套房 150，欧文，CA 92617
如果您无法到达列在窗体顶部的，研究者和有一般性的问题；忧虑或投诉有关研究；有问题关于您作为研究课题的权利；或有一般性的意见或建议。
- 参加这次采访是完全自愿的。您可以拒绝回答任何问题或在任何时间退出研究而不受处罚。您的决定不会影响您和研究员的关系。您有任何问题吗？您同意参加吗？

Appendix 4: Interview Question List

The researcher conducted personal, semi-structured interviews with various professionals knowledgeable about environmental issues and policies in China. Below is a list of the guiding questions used in the interviews for each of the three participant groups.

Governmental Officials:

Background questions

How long have you worked for the ministry of environmental protection (MEP)?

What did you do prior to joining MEP? Have you held any other positions in government?

What interested you about working on environmental regulation policy?

How do you define environmental crime?

Questions about corporations/perpetrators

Who do you think commits this type of crime?

What is your general opinion of the relationship corporations have with the country? How does committing an environmental crime affect this relationship?

Considering this relationship, what is your view on appropriate responses to punishing these kinds of violations by corporations?

How do you think the tougher sanctions may affect their behavior?

Questions about form and extent of harm

What types of harm have you observed caused by illegal dumping?

Which laws/policies were proposed to address these harms? How can they potentially affect this type of behavior?

What has been the worst harm observed so far?

Do you think the harsher punishments are more fitting to the extent of harm caused by these crimes?

What factors contribute to the application of the law protecting public security to a given environmental crime?

Does the public response impact the perception of harm? If so, how?

Questions about approach

What are the procedures involved in regulating corporations? How is this usually enforced?

What kind of issues does local enforcement face when regulating corporations?

Are non-state actors, such as ngos/environmental groups able to help support enforcement?

What are the long term goals in regulating corporations and the environment? How do the harsher sanctions address these goals?

Legal Actors:

Background questions

How long have you been practicing law?

How much experience have you had with environmental crime cases?

When did you get involved with environmental crime cases? Why did you choose to work on these type of cases?

How do you define environmental crime?

Questions about corporations/perpetrators

In your experience, who is the typical perpetrator of environmental crime?

When a corporation is behind an environmental crime, how are the accused individuals generally determined? Have there been any cases where the corporation as a whole has been prosecuted?

What factors about the perpetrator can influence the type of sentence they receive?

Questions about form and extent of harm

What types of harm have you observed among environmental crime cases?

What has been the worst harm observed so far?

What charges are associated with the respective type of harms?

What factors contribute to the application of the law protecting public security to a given environmental crime?

Does the public response impact the perception of harm? If so, how?

Questions about approach

What is your opinion of the formation of specialty environmental courts?

In your opinion, are environmental-related cases typically handled in civil or criminal court?

What factors about a given violation influence the form of legal response?

What do you think is the future direction of environmental regulation?

Experts:

Background questions

How long has your work focused on environmental issues?

How much have you published regarding these issues in China?

What drew you to this topic?

Is there a specific aspect about this topic you've chosen to focus on?

How do you define environmental crime?

Questions about corporations/perpetrators

What is the typical description of a perpetrator of environmental crime?

How would you describe the role (generally and specifically on the state of the environment) of corporations in China?

What are your opinions regarding the policies on regulating and punishing these perpetrators?

Do they seem to address certain characteristics of the perpetrator?

Questions about form and extent of harm

What types of harm have you observed?

What has been the worst harm observed so far?

How far reaching does the impact of this harm appear to be?

What is your opinion of the increased punitiveness of sanctions against environmental crimes?

Questions about approach

What issues have you observed on how enforcement responds to these crimes?

What is your perspective on the (potential) role of non-state actors in environmental regulation?

What do you think is the future direction of environmental regulation?