

TOXIC INTENT:
ENVIRONMENTAL HARM,
CORPORATE CRIME, AND THE
CRIMINAL ENFORCEMENT OF
FEDERAL ENVIRONMENTAL
LAWS IN THE UNITED STATES

Joshua Ozymy & Melissa Jarrell Ozymy

ENVIRONMENTAL LAW INSTITUTE
Washington, D.C.

Copyright © 2023 Environmental Law Institute
1730 M Street NW, Washington, DC 20036

Published January 2023.

Printed in the United States of America
ISBN 978-1-58576-242-2

Cover design by Evan Odoms.

Table of Contents

About the Authors.....	v
List of Acronyms	vii
Introduction	ix
Chapter 1. Between Us and a Toxic World	1
I. Profit Over Public Health: Serious Environmental Crimes and Chronic Offenders	1
II. The Evolution of the Criminal Enforcement of Environmental Crimes in the United States.....	7
Chapter 2. I Know What You Did With the Asbestos Last Summer: The Criminal Enforcement of the U.S. Clean Air Act	21
I. Enforcing the U.S. Clean Air Act.....	21
II. Themes in Clean Air Act Prosecutions	34
III. Penalties in Clean Air Act Prosecutions	52
IV. Conclusion	57
Chapter 3. We Didn't Permit That Discharge: The Criminal Enforcement of the U.S. Clean Water Act.....	59
I. Enforcing the U.S. Clean Water Act.....	59
II. Themes in CWA Prosecutions	71
III. Penalties in CWA Prosecutions	86
IV. Conclusion.....	90
Chapter 4. You Should Have Warned Me: The Criminal Enforcement of the U.S. Resource Conservation and Recovery Act and Superfund.....	95
I. Enforcing the U.S. Resource Conservation and Recovery Act and Superfund.....	95

II.	Themes in RCRA and CERCLA Prosecutions	103
III.	Penalties in RCRA and CERCLA Prosecutions	113
IV.	Conclusion.....	117
Chapter 5.	Misapplication: The Criminal Enforcement of the Toxic Substances Control Act and the Federal Insecticide, Fungicide, and Rodenticide Act.....	119
I.	Enforcing the Toxic Substances Control Act and the Federal Insecticide, Fungicide, and Rodenticide Act	119
II.	Themes in TSCA and FIFRA Prosecutions	129
III.	Penalties in TSCA and FIFRA Prosecutions.....	139
IV.	Conclusion.....	142
Chapter 6.	A Framework for Understanding the Criminal Enforcement of Federal Environmental Laws	145
I.	Synthesizing the History of Federal Criminal Enforcement Efforts.....	145
II.	Explaining Federal Enforcement Efforts	151
Chapter 7.	The Green Police: Criminal Enforcement and the Prospects for Deterrence in the Era of Climate Change	161
I.	Resources for Deterrence	161
II.	The Big Stick	168
III.	Politics and the Future of Criminal Enforcement	177

About the Authors

Joshua Ozymy is an Associate Professor of Political Science in the Department of Political Science and Public Service at the University of Tennessee at Chattanooga. His research centers on environmental law and social policy, particularly how we enforce environmental laws and how they might be improved to better protect the most vulnerable members of society. He was previously a Professor of Political Science and Director of the Honors Program and Strategic Initiatives at Texas A&M University-Corpus Christi.



Melissa Jarrell Ozymy is a Professor of Criminology and Department Head of Social, Cultural and Justice Studies at the University of Tennessee at Chattanooga. Her research focuses on environmental crime and victimization, environmental justice, and how environmental crimes are portrayed in the media. She was previously a Professor of Criminal Justice and Dean of University College at Texas A&M University-Corpus Christi.

List of Acronyms

AHERA	Asbestos Hazard Emergency Response Act
AOCs	administrative orders of consent
API	American Petroleum Institute
APPS	Act to Prevent Pollution From Ships
ARP	Acid Rain Program
BACT	best available control technology
BCF	bromochlorodifluoromethane
BJS	Bureau of Justice Statistics
BP	British Petroleum
CAA	Clean Air Act
CAFÉ	Corporate average fuel economy
CAFOs	concentrated animal feeding operations
CERCLA	Comprehensive Environmental Resource, Compensation, and Liability Act
CFCs	chlorofluorocarbons
CID	Criminal Investigation Division
CO	carbon monoxide
COPD	chronic obstructive pulmonary disease
CWA	Clean Water Act
CWSRF	Clean Water State Revolving Funds
DMRs	discharge monitoring reports
DOJ	U.S. Department of Justice
ECS	Environmental Crimes Section
EPA	U.S. Environmental Protection Agency
ENRD	Environment and Natural Resources Division
EPCRA	Emergency Planning and Community Right-To-Know Act
FBI	Federal Bureau of Investigation
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
FWS	U.S. Fish and Wildlife Service
FY	fiscal year
HAPs	hazardous air pollutants
HCFCs	hydrochlorofluorocarbons
LAER	lowest achievable emission rate
LEVs	low emission vehicles

MACT	maximum achievable control technology
MBTA	Migratory Bird Treaty Act
NAAQS	national ambient air quality standards
NESHAPs	national emission standards for hazardous air pollutants
NHTSA	National Highway Transportation Safety Administration
NO _x	nitrogen oxide
NOAA	National Oceanic and Atmospheric Administration
NPDES	national pollutant discharge elimination system
NPL	national priorities list
NSPS	new source performance standards
NSR	new source review
O ₃	ozone
OCEFT	Office of Criminal Enforcement, Forensics, and Training
OECA	Office of Enforcement and Compliance Assurance
OEE	Office of Environmental Enforcement
OPPT	Office of Pollution and Prevention
PBBs	polybrominated biphenyls
PCBs	polychlorinated biphenyls
PEER	Public Employees for Environmental Responsibility (PEER)
PM	particulate matter
POTWs	publicly owned treatment works
PRASA	Puerto Rico Aqueducts and Sewer Authority
PRPs	potentially responsible parties
PSD	prevention of significant deterioration
RCRA	Resource Conservation and Recovery Act
RGGI	Regional Greenhouse Gas Initiative
RIBITS	Regulatory In-Lieu Fee and Bank Tracking System
RICO	Racketeer Influenced and Corrupt Organizations Act
ROVs	remotely operated underwater vehicles
SARA	Superfund Authorization and Reorganization Act
SEPs	supplemental environmental projects
SIPs	state implementation plans
SO ₂	sulfur dioxide
SO _x	sulfur oxide
TCEQ	Texas Commission on Environmental Quality
TSCA	Toxic Substances Control Act
VOCs	volatile organic compounds

Introduction

This book is intended to help readers better understand how the U.S. Environmental Protection Agency (EPA) and the U.S. Department of Justice (DOJ) have historically investigated and prosecuted serious violations of federal environmental law in the United States. When thinking about the relationship between environmental law, crime, policing, and prosecution, the *Deepwater Horizon* case may come to mind, where a major multinational corporation saved billions of dollars through a pattern of criminal malfeasance that killed and injured numerous individuals, brought untold suffering to their families, caused people to lose their livelihoods, wrought economic damages to state and local governments, and permanently polluted many of the environments in the country in which they operated.¹ Whether it is a corporation knowingly engaging in patterned criminal behaviors that kill people or cases of midnight dumping, protecting the environment requires acknowledging that numerous companies and individuals may be committed to willfully breaking the law.² Environmental crimes cause more damage than street crime in the United States but are often not conceptualized in such a way by the mass public and most of these stories go untold.³ Enhancing statutory penalties, developing environmental law enforcement, and professionalizing prosecutorial resources over the past four decades has been undertaken to deter and punish actions that negatively impact humans, animals, and the natural environment in the United States, but the scope of these efforts remains unclear.⁴

-
1. Elizabeth A. Bradshaw, *Deepwater, Deep Ties, Deep Trouble: A State-Corporate Environmental Crime Analysis of the 2010 Gulf of Mexico Oil Spill* (2012) (unpublished Ph.D. dissertation, Western Michigan Univ.), <https://scholarworks.wmich.edu/cgi/viewcontent.cgi?article=1078&context=dissertations>; *BP Expl. & Prod. Inc. v. United States*, No. 2:12-cr-00292-SSV-DEK (E.D. La. filed Jan. 16, 2013).
 2. Michael J. Lynch, *The Sentencing/Punishment of Federal Environmental/Green Offenders, 2000-2013*, 38 *DEVIANT BEHAV.* 991-95 (2017).
 3. Melissa L. Jarrell, *Environmental Crime and Injustice: Media Coverage of a Landmark Environmental Crime Case*, 6 *Sw. J. CRIM. JUST.* 25-44 (2009); Michael J. Lynch et al., *Media Coverage of Chemical Crimes: Hillsborough County, Florida, 1987-1997*, 40 *BRITISH J. CRIMINOLOGY* 112-14 (2000).
 4. David M. Uhlmann, *Prosecutorial Discretion and Environmental Crime*, 38 *HARV. ENVTL. L. REV.* 159 (2014); Michael J. Lynch et al., *Weak Probability of Punishment for Environmental Offenses and Deterrence of Environmental Offenders: A Discussion Based on USEPA Criminal Cases, 1983-2013*, 37 *DEVIANT BEHAV.* 1095 (2016).

The value of this book lies in developing a broader empirical and conceptual understanding of how federal environmental laws are enforced in the United States through a criminal process. We provide the broadest empirical study to date of the investigation and prosecution of federal environmental crimes in the United States. We systematically collect data on all environmental crimes investigated by EPA that were successfully prosecuted from 1983 to 2019. This approach gives us 2,588 cases to analyze in order to draw out the larger picture of how the criminal enforcement apparatus has evolved over its lifecycle, including what types of crimes are investigated and prosecuted, who commits such crimes, how federal prosecutors use criminal provisions in major environmental statutes to prosecute offenders, and ultimately the patterns in how guilty parties are punished. Through such an analysis we can glean the evolution of the use of criminal enforcement tools for the environment, as well as how environmental law has evolved alongside of and because of these efforts and develop a broader framework for understanding criminal enforcement.

We draw on our own experience for context, as we acted for years as participant observers in a lengthy federal environmental crime prosecution.⁵ That case and experience taught us how environmental investigations begin, how task forces are assembled, how agencies work with one another, how prosecutors bring charges and try complex cases, the process of legal defense, the role of the greater community in prosecutions, and the politics of sentencing and appeals. Through our own experiences, but primarily through building a systematic database of criminal investigations and prosecutions, we are able to provide the broadest overview of the evolution of this process to date.

This project locates itself between the legal, public policy, and environmental/green criminology literatures. To be more exacting, we find the

5. The case was *United States v. CITGO Petroleum Corp.*, 908 F. Supp. 2d 812 (S.D. Tex. 2012). The case was unique in that prosecutors worked to include community members near CITGO's refinery as victims under the federal Crime Victims' Rights Act. (18 U.S.C. §3771). We played a role in the initial investigation, prosecution, and orchestrating an appeal to the U.S. Court of Appeals for the Fifth Circuit to have victims recognized under the Act. This became the first federal prosecution that recognized an environmental justice community as victims of a corporate environmental crime in the United States, but was eventually overturned on appeal. For background, see Suzie Canales et al., *Risk Assessment or Risk Acceptance: An Activist's Perspective on Why the EPA's Attempts to Achieve Environmental Justice Have Failed and What They Can Do About It*, 5 ENVTL. JUST. 59-62 (2012); Melissa L. Jarrell et al., *How to Encourage Conflict in the Environmental Decision-Making Process: Imparting Lessons From Civic Environmentalism to Local Policymakers*, 18 LOCAL ENV'T 184-200 (2013); Joshua Ozymy & Melissa L. Jarrell, *Implementing a Partial Buyout of an Environmental Justice Community*, 10 ENVTL. JUST. 43-50 (2017); Joshua Ozymy & Melissa Jarrell, *Righting and "Writing" Wrongs: A Postmortem on a Decade of Environmental Justice Activism in Corpus Christi, Texas*, 11 ENVTL. JUST. 23-31 (2019).

book's intellectual legacy and fit between Kathleen Brickey's work that was one of the first to bridge criminal law and environmental law, particularly her book *Environmental Crime: Law, Policy, Prosecution* and Joel Mintz's *Enforcement at the EPA: High Stakes and Hard Choices* and related work, which provides a detailed historical and organizational analysis of the founding, work, and struggles of EPA's Criminal Investigation Division (EPA-CID) to build a cohesive and valuable organization with inconsistent budgetary support and consistent political opposition.⁶ We are also responding to the green criminology literature that has studied the deterrent effect of criminal sanctioning on environmental offenders, particularly corporate and white collar offenders.⁷ With these three literatures, we have a solid understanding of how criminal law developed alongside environmental law, how environmental crimes are policed, how they are prosecuted, and the effects of these efforts on deterring crime.⁸ What we lack from all three literatures is a systematic empirical accounting of what EPA-CID and DOJ's Environmental Crimes Section (ECS) have more or less accomplished in the roughly 37 years since the criminal enforcement apparatus was institutionalized. It is the task of arduously collecting, analyzing, and understanding this phenomenon that we have dedicated ourselves.

Chapter 1 lays the foundations for the following chapters, where we delve into major environmental statutes to show charging and sentencing patterns

-
6. KATHLEEN F. BRICKEY, *ENVIRONMENTAL CRIME: LAW, POLICY, PROSECUTION* (Aspen Publishers 2008); JOEL A. MINTZ, *ENFORCEMENT AT THE EPA: HIGH STAKES AND HARD CHOICES* (Univ. of Texas Press 2012).
 7. MICHAEL J. LYNCH & PAUL B. STRETESKY, *EXPLORING GREEN CRIMINOLOGY: TOWARDS A GREEN REVOLUTION IN CRIMINOLOGY* (Ashgate 2014). See *Weak Probability of Punishment*, *supra* note 4. See also Michael J. Lynch, *The Sentencing/Punishment of Federal Environmental/Green Offenders, 2000-2013*, 38 *DEVIAN'T BEHAV.* 991-95 (2017).
 8. Exploring the deterrent value of criminal sanctioning of environmental offenders is still an open question and the nature of criminal law and environmental law, policing, and prosecution are also evolving topics. On all these topics and in line with the work of Lynch, Brickey, and Mintz we have also contributed a series of articles over the years and will shamelessly cite them here: Joshua Ozymy & Melissa L. Jarrell, *Upset Over Air Pollution: Analyzing Upset Events Emissions at Petroleum Refineries*, 28 *REV. POL'Y RES.* 28, 363-79 (2011); Melissa L. Jarrell & Joshua Ozymy, *Real Crime, Real Victims: Environmental Crime Victims and the Crime Victims' Rights Act (CVRA)*, 58 *CRIM. L. & SOC. CHANGE* 373-89 (2012); Joshua Ozymy & Melissa L. Jarrell, *Upset Events, Regulatory Drift, and the Regulation of Air Emissions at Industrial Facilities in the United States*, 21 *ENVTL. POL.* 451-66 (2012); Joshua Ozymy & Melissa L. Jarrell, *Wielding the Green Stick: An Examination of Criminal Enforcement at the EPA Under the Bush and Obama Administrations*, 24 *ENVTL. POL.* 38-56 (2015); Joshua Ozymy & Melissa L. Jarrell, *Why Do Regulatory Agencies Punish? The Impact of Political Principals, Agency Culture, and Transaction Costs in Predicting Environmental Criminal Prosecution Outcomes in the United States*, 33 *REV. POL'Y RES.* 71-89 (2016); Joshua Ozymy & Melissa L. Jarrell, *Administrative Persistence in the Face of a Hostile Regime: How the EPA Can Survive the Trump Administration*, 10 *ENVTL. JUST.* 1-8 (2017); Melissa L. Jarrell, et al., *Where the Wild Things Are: Animal Victimization at the Intersection of Wildlife Law and Environmental Law*, 3 *CONTEMP. JUST. REV.* 319-35 (2017); and Mike Lynch et al., *Executive Actors and Environmental Enforcement: Examining the "Rick Scott Effect" in the U.S. State of Florida*, 36 *REV. POL'Y RES.* 395-413 (2019).

and extrapolate general themes for how prosecutors have used criminal provisions in these laws for about four decades. We approach these systematically and comprehensively, beginning with the Clean Air Act (CAA) in Chapter 2. This is followed by the Clean Water Act (CWA) in Chapter 3 and both the Resource Conservation and Recovery Act (RCRA) and Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) also known as Superfund in Chapter 4. Chapter 5 analyzes the criminal enforcement of the Toxic Substances Control Act (TSCA) and the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA).⁹ Exploring the application and enforcement of environmental law through a criminal process using these major acts helps provide the larger picture of how we enforce regulations on air, water, hazardous waste, chemical substances, toxic dumps, chemical spills, and other environmental problems.¹⁰ Chapter 6 creates a general framework from the broader themes that emerge from the prosecu-

-
9. CAA, 42 U.S.C. §85. An analysis of toxicity in the air begins with the Air Pollution Control Act of 1955 (Pub. L. No. 84-159), which was the first major federal effort to identify and control air pollution. While weak, it acknowledged air pollution as a national problem. The CAA of 1963 (Pub. L. No. 88-206) started the process of research methods to control air pollution. The National Emissions Standards Act of 1965 (Pub. L. No. 89-272) set vehicle emissions standards. The CAA Extension of 1970 (Pub. L. No. 91-604) represents the first time the federal government took the lead on regulating air pollution. CWA, 33 U.S.C. §1251. The Federal Water Pollution Control Act Amendments of 1972 (Pub. L. No. 92-500), formed the basis for the CWA, which gives EPA the authority to regulate discharges into the waterways of the United States including rivers, estuaries, and wetlands. Amended in 1977 and 1987, with the Water Quality Act, EPA was given authority to develop a regulatory framework for such discharges. CERCLA, 2 U.S.C. §11001. CERCLA empowers EPA to create a fund to clean up hazardous waste that has no responsible parties or to find responsible parties to fund the cleanup and remediation of hazardous waste sites. CERCLA can act as a companion to the Agency's authority under RCRA and other statutes. RCRA, 42 U.S.C. §82. RCRA establishes a national framework for hazardous waste control. It gives EPA authority over hazardous and solid waste from cradle-to-grave. This authority allows EPA to develop standards for landfills, remediation in ground or surface water, and the operation of disposal facilities for solid and hazardous waste. TSCA, 15 U.S.C. §1261. TSCA authorizes EPA to regulate and manage chemical substances. This provides authority over manufacturing, use, distribution, importation, and exportation of a range of substances. FIFRA, 7 U.S.C. §136. FIFRA is the culmination of a series of laws meant to establish the quality and integrity of pesticides in the United States. This effort began as a truth-in-labeling mandate and evolved to consider risks to public health. EPA is allowed to set tolerances for pesticides so there is "reasonable certainty of no harm" and maximum residue limits for pesticides in food.
10. There are other major federal environmental laws passed in this era of rapid innovation in environmental protection that are germane to the content herein but, based on the low number of prosecutions, do not merit their own chapters; however, they are discussed in each chapter as appropriate. Some that bear mention include: Safe Water Drinking Act (SWDA), 42 U.S.C. §300f, which authorizes EPA to set water quality standards for public water systems and injection wells, but not bottled water or smaller private wells, and allows for the development of maximum containment levels to determine the threshold for some substances in drinking water; Endangered Species Act (ESA), 16 U.S.C. §1531, which creates a framework for conservation of threatened plants, animals, and their habitats and requires federal agencies to consider the impacts of their actions on listed species; and the National Environmental Policy Act (NEPA), 42 U.S.C. §4321, which requires environmental impact assessments for actions of federal agencies (a companion statute, the Environmental Quality Improvement Act (42 U.S.C. §4371), creates the President's Council on Environmental Quality connecting the executive branch to environmental issues).

tions analyzed in the previous chapters. Chapter 7 examines the possibilities for expanding the scope of the criminal enforcement of these laws and explores the challenges to advancing that cause now and in the future.

The United States lies at a critical juncture where the public has slowly developed a greater conscious awareness that we have and continue to orchestrate the rapid onslaught of climate change.¹¹ This realization and the subsequent effects that are already upon us and are likely irreversible or worse than our imaginations can bear, will cause the greatest shift in the way we view and interact with the natural environment since industrialization. Like the 1970s, where the modern Prometheus was revealed as a sickened and pitiful creature of a poisoned environment, the rapid onslaught of major environmental change that will seem incremental but will in the end become totalizing and will force us to reorient our society in ways we can yet conceive.

Managing this shift will exact a terrible environmental and financial cost and require a collective will that goes beyond our historical-cultural picture of progress through individual will, determination, and mastery, to achieve ascendant consumption. Companies and individuals will not go willingly, and the federal and state governments are ill-equipped to manage this shift in cooperative federalism, particularly as rapidly escalating debt and demographic shifts will prevent us from prioritizing environmental concerns and will lessen the federal government's hold on the states. Managing climate change will require not only a change in focus and laws and regulations, but enforcement. For this shift to work, we must better understand how we manage serious environmental crimes and learn to better prevent them or if not, to punish effectively.

11. Rob Swat & Frank Raes, *Making Integration of Adaption and Mitigation Work: Mainstreaming Into Sustainable Development Policies?*, 7 CLIMATE POL'Y 289-303 (2007).