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ESSAYS

HOW CRIMINAL LAW CAN HELP SAVE THE ENVIRONMENT

BY

RENA STEINZOR*

The nation is experiencing a white collar crime boomlet, if not a wave, of offenses that harm public health, jeopardize worker and consumer safety, and threaten the environment. Some big cases have settled and others are being tried. Still others are under investigation, including the notorious Volkswagen (VW) “defeat device” case that continues to make news almost every day. Stung by criticism that too-big-to-fail banks escaped criminal prosecution for the 2008 market crash that continues to cause misery in the country, the Department of Justice has pledged to indict individual corporate executives whenever possible. It has yet to deliver on that promise, but unless Republicans retake the White House and carry through on pledges to further dismantle the regulatory state, every account of high-profile corporate malfeasance will speculate about criminal implications.

These developments do not represent an idiosyncratic emergence of a handful of rogue corporations and executives even as their competitors studiously avoid running afoul of the law. Instead, a relentless campaign against big government has produced weak to nonexistent enforcement as well as widespread corporate disdain for regulatory requirements. Without any question, criminal law is the last resort. It closes the barn door after the horses have run free, leaving the aftermath of an incident to be ameliorated at great cost, often over periods of several years. Environmental laws were enacted because of similar flaws in the tort system with the goal of preventing injury rather

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than merely compensating it. Good regulation enforced aggressively to prevent harm is always a better choice. But congressional conservatives and their industry allies have embarked on a highly successful strategy of starving and badgering the agencies—even the Environmental Protection Agency, the strongest and most rebellious among them—into quiescence. In the vacuum that remains, criminal prosecutions, especially of individual senior executives, have a better potential to deter violations than the broken regulatory system.

This Essay explores, contrasts, and compares the two most prominent criminal cases that have emerged in the last several years: the \$4 billion criminal settlement with British Petroleum that resulted from the Deepwater Horizon blowout and oil spill and the VW cheat device scandal. The similarities between the two cases are chilling. They suggest that until and unless the regulatory state is not just revived but greatly strengthened, a result that does not seem foreseeable in the near-term, criminal prosecution is the best hope for people who believe that the government must redouble its efforts to preserve natural resources and protect the public health.

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I. INTRODUCTION

The nation is experiencing a white collar crime boomlet, if not a wave, of offenses that harm public health, jeopardize worker and consumer safety, and threaten the environment. Prosecutors have indicted corporate and individual defendants. Some big cases have settled and others are being tried. Still others are under investigation, including the notorious Volkswagen (VW) “defeat device” case that made front-page news just a few days before this talk.¹ If 2007 was the “year of the recall,”² 2014 and 2015 were the “years of the indictment,” with no end in sight.

¹ Coral Davenport & Jack Ewing, *VW Is Said to Cheat on Diesel Emissions: U.S. to Order Big Recall*, N.Y. TIMES, Sept. 18, 2015, <http://www.nytimes.com/2015/09/19/business/volkswagen-is-ordered-to-recall-nearly-500000-vehicles-over-emissions-software.html> (last visited Feb. 13, 2016).

In the environmental arena, prosecutors have targeted the Deepwater Horizon explosion and spill in the Gulf of Mexico (eleven men died and 4.09 million barrels of crude oil spilled into fragile Gulf ecosystems over an agonizing period of eighty-seven days);³ the chemical leak that contaminated the drinking water of Charleston, West Virginia (the chemical, 4-methylcyclohexanemethanol, had never been tested for toxicological effects, and though federal and state experts indicated that the water was safe to drink, many abstained because it carried a chemical smell);⁴ and the VW air emissions control cheat device scandal (the company installed software in eleven million diesel cars sold in the United States and Europe that disabled pollution controls during normal driving, causing emissions to exceed safe levels by as much as forty percent, depending on driving conditions and other factors).⁵

In the consumer and worker safety arenas, criminal cases have targeted the New England Compounding Center's shipment of thousands of supposedly sterile steroid injects that were in fact contaminated with fungal meningitis (sixty-four people died and 751 were severely sickened);⁶ the Upper Big Branch mine collapse (twenty-nine men killed in the worst mine disaster in forty years);⁷ the sale of salmonella-tainted peanut butter (nine

² Gene Grabowski, *The Year of the Recall Response*, FOOD SAFETY MAG., Feb.–Mar. 2008, <http://www.foodsafetymagazine.com/magazine-archive1/februarymarch-2008/the-year-of-the-recall-response/> (last visited Feb. 13, 2016); Louise Story & David Barboza, *Mattel Recalls 19 Million Toys Sent from China*, N.Y. TIMES, Aug. 15, 2007, <http://www.nytimes.com/2007/08/15/business/worldbusiness/15imports.html> (last visited Feb. 13, 2016).

³ Clifford Krauss, *In BP Indictments, U.S. Shifts to Hold Individuals Accountable*, N.Y. TIMES, Nov. 15, 2012, <http://www.nytimes.com/2012/11/16/business/energy-environment/in-bp-indictments-us-shifts-to-hold-individuals-accountable.html> (last visited Feb. 13, 2016). For the size and scope of the spill, see Bill Trott, *U.S. Appeals Ruling on Size of BP Oil Spill*, REUTERS, Mar. 14, 2015, <http://www.reuters.com/article/2015/03/14/us-bp-trial-appeal-idUSKBNOMA0QB20150314#yqGdHgOYzUL5mA30.97> (last visited Feb. 13, 2016) (BP and the U.S. government disagree about the size of the spill; 4.09 million barrels is the government figure); see also John M. Broder, *BP Shortcuts Led to Gulf Oil Spill, Report Says*, N.Y. TIMES, Sept. 14, 2011, <http://www.nytimes.com/2011/09/15/science/earth/15spill.html> (last visited Feb. 13, 2016) (discussing the 87 days that passed before the spill was under control).

⁴ Michael Wines, *Owners of Chemical Firm Charged in Elk River Spill in West Virginia*, N.Y. TIMES, Dec. 17, 2014, <http://www.nytimes.com/2014/12/18/us/owners-of-chemical-company-charged-in-elk-river-spill.html> (last visited Feb. 13, 2016); U.S. Geological Survey, *Chemicals in Elk River Spill Lingered Longer, Traveled Farther: USGS Study Provides New Insights*, <http://www.usgs.gov/newsroom/article.asp?ID=4095&from=rss> (last visited Feb. 13, 2016).

⁵ Davenport & Ewing, *supra* note 1; Andreas Cremer, *Volkswagen to Refit Cars Affected by Emissions Scandal*, REUTERS, Sept. 30, 2015, <http://www.reuters.com/article/2015/09/30/us-volkswagen-emissions-plan-idUSKCN0RT00L20150930#eQjeo9bWh36AcMQ2.97> (last visited Feb. 13, 2016).

⁶ Kay Lazar & Todd Wallack, *14 Executives, Staff Charged in Tainted Drug Case*, BOS. GLOBE, Dec. 17, 2014, <http://www.bostonglobe.com/metro/2014/12/17/feds-arrest-tied-necc-closed-pharmacy-blamed-causing-deaths-with-tainted-drugs/24QytISVdaqXDNsSUOsNyJ/story.html> (last visited Feb. 13, 2016); U.S. Dep't of Justice, *14 Indicted in Connection with New England Compounding Center and Nationwide Fungal Meningitis Outbreak*, Dec. 17, 2014, <http://www.justice.gov/opa/pr/14-indicted-connection-new-england-compounding-center-and-nationwide-fungal-meningitis> (last visited Feb. 13, 2016).

⁷ Ken Ward Jr., *Longtime Massey Energy CEO Don Blankenship Indicted*, CHARLESTON GAZETTE-MAIL, Nov. 13, 2014, <http://www.wvgazette.com/article/20141113/GZ01/141119629>

dead)⁸ and eggs (at least 1,900 and potentially as many as 56,000 sickened),⁹ and listeria-tainted cantaloupe (thirty-three dead),¹⁰ and fatal defects in millions of cars sold by Toyota¹¹ and General Motors (the company paid claims to the families of 124 people, but that number is likely to at least double),¹² as well as the as-yet unknown number of vehicles that may contain exploding Takata airbags (so far, more than an astounding thirty million cars have been recalled for that defect alone).¹³

Altogether, these cases involve hundreds of deaths, thousands of injuries, and billions of dollars in damage to the environment, consumers, workers, and, not incidentally, the companies involved. The VW scandal, for example, has provoked the company to write off \$7.5 billion in anticipation of what it will cost to solve the problem.¹⁴

Is the emergence of criminal investigations and indictments an anomaly that happened to coalesce without a unifying cause and will vanish just as suddenly? My analysis suggests not. These developments are not an idiosyncratic emergence of rogue corporations and executives who have done their damage while their competitors studiously avoid running afoul of the law. Instinctively understanding the inattention to the law occurring at some of the biggest companies in the most hazardous industries, the

(last visited Feb. 13, 2016); Peter Galuszka, *Safety Last: One of the Most Reprehensible Bosses in Recent History is Finally Facing Justice*, SLATE, Sept. 30, 2015, http://www.slate.com/articles/news_and_politics/jurisprudence/2015/09/don_blankenship_trial_boss_of_massey_during_upper_big_branch_explosion_ignored.html (last visited Feb. 13, 2016).

⁸ Dan Flynn, *Federal Judge to Sentence Parnell Brothers and Wilkerson on Sept. 21*, FOOD SAFETY NEWS, July 20, 2015, <http://www.foodsafetynews.com/2015/07/pca-case-judge-to-sentence-parnell-brothers-and-wilkerson-on-sept-21/> (last visited Feb. 13, 2016) (discussing the nine deaths that resulted from salmonella-tainted peanut butter).

⁹ Associated Press, *Ex-Egg Industry Executives Jailed in Salmonella Outbreak*, N.Y. TIMES, Apr. 13, 2015, <http://www.nytimes.com/2015/04/14/business/ex-egg-industry-executives-jailed-in-salmonella-outbreak.html> (last visited Feb. 13, 2016); Colin Woodard, *Notorious Egg Seller "Jack" DeCoster Gets Jail Time for Salmonella Outbreak*, PORTLAND PRESS HERALD, Apr. 13, 2015, <http://www.pressherald.com/2015/04/13/maine-businessman-jack-decoster-gets-jail-for-selling-tainted-eggs/> (last visited Feb. 13, 2016).

¹⁰ U.S. Attorney's Office, Dist. of Colo., *Eric and Ryan Jensen Charged with Introducing Tainted Cantaloupe into Interstate Commerce*, Sept. 26, 2013, <http://www.justice.gov/usao-co/pr/eric-and-ryan-jensen-charged-introducing-tainted-cantaloupe-interstate-commerce> (last visited Feb. 13, 2016); Mary Beth Marklein, *Cantaloupe Farmers Get No Prison Time in Disease Outbreak*, USA TODAY, Jan. 28, 2014, <http://www.usatoday.com/story/news/nation/2014/01/28/sentencing-of-colorado-cantaloupe-farmers/4958671/> (last visited Feb. 13, 2016).

¹¹ Bill Vlasic & Matt Apuzzo, *Toyota Is Fined \$1.2 Billion for Concealing Safety Defects*, N.Y. TIMES, Mar. 19, 2014, <http://www.nytimes.com/2014/03/20/business/toyota-reaches-1-2-billion-settlement-in-criminal-inquiry.html> (last visited Feb. 13, 2016).

¹² Tom Krisher, *GM Ignition Switch Fund Rejected 91% of Claims*, USA TODAY, Aug. 24, 2015, <http://www.usatoday.com/story/money/cars/2015/08/24/gm-ignition-switch-fund/32282521/> (last visited Feb. 13, 2016) (noting that the company still "faces 181 wrongful death or injury lawsuits due to recalled vehicles in the U.S. and Canada").

¹³ *Everything You Need to Know About the Takata Airbag Recall: What This Recall Means to You and What Actions You Should Take*, CONSUMER REP., Nov. 3, 2015, <http://www.consumerreports.org/cro/news/2014/10/everything-you-need-to-know-about-the-takata-air-bag-recall/index.htm> (last visited Feb. 13, 2016).

¹⁴ *This Company Just Wrote Off More than Volkswagen*, FORTUNE, Oct. 29, 2015, <http://fortune.com/2015/10/29/shell-write-off-charge-loss-earnings/> (last visited Feb. 13, 2016).

Department of Justice (DOJ) now triggers criminal investigations almost immediately after a health, safety, or environmental fiasco hits the national news.¹⁵ Its eagerness to consider criminal sanctions, which became crystal clear as several of the largest car companies in the world admitted to life-threatening problem after problem, is unprecedented historically.¹⁶

Reliable figures are not available to compare the incidence of white-collar criminal prosecutions in the health, safety, and environmental areas over the last several decades. Anecdotally, apart from a fifteen-year period beginning in the late 1980s and lasting into the early 2000s when environmental crimes were prosecuted, compliance counseling, civil remedies, and neglect prevailed at the agencies and within DOJ.¹⁷ Something fundamental has changed and my diagnosis of what has caused these seismic developments suggests we will see many more of these cases.

As I have written elsewhere, the primary cause of incidents that are increasingly identified as crimes is acute regulatory failure that produces weak to nonexistent enforcement as well as widespread corporate disdain for regulatory requirements.¹⁸ Four converging realities have produced this sad state of affairs.¹⁹ Budget cuts have hollowed out crucial agency functions.²⁰ Constant and opportunistic congressional attacks on agency heads have demoralized rank and file civil servants to the point that many have developed a kind of muscle memory for abuse that chills aggressive implementation of the law.²¹ Outmoded statutory authority further undermines effective enforcement and, although the statutes badly need updating, Congress is unlikely to undertake that important, but contentious and exhausting, task any time soon.²² Agencies struggle with a rulemaking process so congealed that emerging problems remain unaddressed and solutions to existing problems remain frozen in time. (We used to call rulemaking “ossified,”²³ but a stronger term like congealed is obviously

¹⁵ For example, there was a very short gap between the VW admission about defeat devices and the announcement of criminal probes. See Davenport & Ewing, *supra* note 1 (noting that the DOJ and EPA began jointly investigating VW shortly after discovery of the defeat devices).

¹⁶ U.S. Dep’t of Justice, *Historical Development of Environmental Criminal Law*, <http://www.justice.gov/enrd/about-division/historical-development-environmental-criminal-law> (last visited Feb. 13, 2016) (explaining that “[i]t took several years for agencies to implement the regulatory programs envisioned under the law,” so “there was little to enforce”).

¹⁷ *Id.* (noting that DOJ expanded its work starting in 1987).

¹⁸ Rena Steinzor, *(Still) “Unsafe at Any Speed”: Why Not Jail for Auto Executives?*, 9 HARV. L. & POL’Y REV. 443, 445–46 (2015).

¹⁹ RENA STEINZOR, WHY NOT JAIL? INDUSTRIAL CATASTROPHES, CORPORATE MALFEASANCE, AND GOVERNMENT INACTION 19 (2015) [hereinafter WHY NOT JAIL?].

²⁰ *Id.* at 19–21.

²¹ *Id.* at 19, 37–38.

²² Steinzor, *(Still) “Unsafe at Any Speed”*, *supra* note 18, at 445–46. In fairness, having lived through the reauthorization of Superfund in 1986 as a House counsel integrally involved in the bruising battles that went on for three years to produce a final law, I can attest that congressional reluctance to undertake such projects in these polarized times is understandable, albeit irresponsible. See Superfund Amendments and Reauthorization Act of 1986, Pub. L. No. 99-499, 100 Stat. 1613 (1986).

²³ For excellent analyses of how the rulemaking process has evolved from ossified to congealed, compare Thomas O. McGarity, *Some Thoughts on “Deossifying” the Rulemaking*

necessary). The direct result is a series of incidents that take lives and destroy natural resources.

Without any question, criminal law is the last resort. Admittedly, it closes the barn door after the horses have run free, never giving lives back and leaving the aftermath of an incident to be ameliorated at great cost, often over periods of several years. Environmental laws were enacted because of similar flaws in the tort system, which is far better at compensating injury than preventing it.²⁴ Good regulation prosecuted aggressively is always a better choice. But congressional conservatives and their industry allies have embarked on a highly successful strategy of starving and badgering the agencies—even the Environmental Protection Agency (EPA), the most favored and rebellious among them—into quiescence. In the vacuum that remains, criminal prosecutions, especially of individual senior executives, have a better potential to deter violations than the broken regulatory system. A third goal of the criminal law—what the legal historian Lawrence Friedman describes as the setting of “moral boundaries” to show a society “where the line lies between good and bad”²⁵—is too often overlooked. Its application to renegade companies and their well-compensated executives has become extraordinarily important to the quality of life in the developed and developing worlds. In sum, until and unless the regulatory state is not just revived but greatly strengthened, a result that does not seem foreseeable in the near-term, criminal prosecution is the best hope for people who believe that the government must redouble its efforts to preserve natural resources and protect the public health.

This observation brings us to two of the biggest corporate scandals of all time: the Macondo well blowout that wrecked the Deepwater oil rig and VW cheat devices.²⁶ Before delving into the regulatory failures that explain those catastrophes and how the criminal law applies to what happened, a brief history of criminal prosecutions for environmental violations will indicate just how powerful a tool the law can be when used by smart and creative prosecutors.

Process, 41 DUKE L.J. 1385, 1386–87 (1992) (discussing the ossification of informal rulemaking, the adverse consequence of this phenomenon, and ways to avoid ossification through tools to make informal rulemaking more useful), with Thomas O. McGarity, *Administrative Law as Blood Sport: Policy Erosion in a Highly Partisan Age*, 61 DUKE L.J. 1671, 1681–82 (2012) (discussing the general characteristics of administrative law as a blood sport and the implications of this for administrative law).

²⁴ See Richard J. Lazarus, *The Greening of America and the Graying of United States Environmental Law: Reflections on Environmental Law's First Three Decades in the United States*, 20 VA. ENVTL. L.J. 75, 88 (2001) (observing that environmental law challenged limitations of tort law that made recovery for environmental harms difficult).

²⁵ LAWRENCE M. FRIEDMAN, *CRIME AND PUNISHMENT IN AMERICAN HISTORY* 10 (1993).

²⁶ Clifford Krauss, *In BP Indictments, U.S. Shifts to Hold Individuals Accountable*, N.Y. TIMES, Nov. 16, 2012, at B1; Coral Davenport & Jack Ewing, *U.S. Orders Major VW Recall Over Emissions Test Trickery*, N.Y. TIMES, Sept. 19, 2015, at B2.

II. RESPONSIBLE CORPORATE OFFICERS

The last time environmental lawyers had a serious debate regarding criminal prosecution's core federal statutes was during the first half of the 1990s, when the efforts of a specialized group of DOJ prosecutors known as the Environmental Crimes Section²⁷ resulted in a sharp uptick in such cases. In a nod to the widespread popularity of environmental protection, the Section operated independently from the much larger Criminal Division,²⁸ which meant that these attorneys had the opportunity to elevate the substantive mission of the office above DOJ's broader institutional concerns. But when George H.W. Bush took over from Ronald Reagan, a controversy erupted regarding allegations that he had suppressed meritorious criminal cases.²⁹ President Bush shared President Reagan's sympathy for business concerns at the same time that he sought to establish a legacy as an environmental president by supporting historic amendments to the Clean Air Act.³⁰ Congressional Democrats seized on the allegations that criminal cases were being fixed for the president's business friends, and Congressman John Dingell (D-MI), the powerful chairman of the House Energy & Commerce Committee, committed the full power of his oversight authority to investigating the alleged malfeasance.³¹

The debate over the possibility that prosecutors could abuse their discretion by reading environmental statutes overly broadly was taken up in the academy by an unlikely protagonist. Richard Lazarus—a professor first at Washington University School of Law, next at Georgetown Law Center, and now at Harvard Law School—had served on the transition team that examined allegations regarding the conduct of the Environmental Crimes Section for President-Elect Bill Clinton.³² In 1995, he published a landmark law review article suggesting that because environmental law was relatively new and still being integrated with more traditional legal principles, criminal prosecutions were prone to abuse.³³ Lazarus was then and is now generally perceived to be a liberal who believes in the goals of the statutes, so his

²⁷ U.S. Dep't of Justice, *Environmental Crimes Section*, <http://www.justice.gov/enrd/environmental-crimes-section> (last visited Feb. 13, 2016).

²⁸ U.S. Dep't of Justice, *Historical Development of Environmental Criminal Law*, <http://www.justice.gov/enrd/about-division/historical-development-environmental-criminal-law> (last visited Feb. 13, 2016) (“[T]he Environmental Crimes Section became a fully independent Section within the Environmental and Natural Resources Division.”).

²⁹ See, e.g., *EPA's Criminal Enforcement Program: Hearing Before the Subcomm. on Oversight and Investigations of the H. Comm. on Energy and Commerce*, 102d Cong., 2d Sess. 1–2 (1992) [hereinafter *H. Comm. on Energy and Commerce*] (discussing concerns over suppression of EPA cases during the Reagan administration).

³⁰ 42 U.S.C. §§ 7401–7671q (2012). See Presidential Statement on Signing the Bill Amending the Clean Air Act, 2 PUB. PAPERS 1602 (Nov. 15, 1990).

³¹ See, e.g., *H. Comm. on Energy and Commerce*, *supra* note 29 (memorandum from Rep. John D. Dingell explaining the Subcommittee's purpose of investigating alleged malfeasance).

³² Richard J. Lazarus, *Curriculum Vitae* (2014), available at http://www.law.harvard.edu/faculty/rlazarus/docs/LAZARUS_CV_12_May_2014.pdf.

³³ Richard J. Lazarus, *Meeting the Demands of Integration in the Evolution of Environmental Law: Reforming Environmental Criminal Law*, 83 GEO. L.J. 2407, 2428–40, 2478–79 (1995).

residence on the other side of the ideological spectrum attracted significant attention.³⁴

Lazarus took the position that the “responsible corporate officer” or “RCO” doctrine (also referred to as the “responsible relation doctrine”) enables prosecutors to presume that defendants should be on notice regarding the details of the acts prohibited by law, when all they really know is that certain activities are regulated without understanding the technical specifics of the rules that apply.³⁵ He argued that because environmental law is quite complex and is based on technical and scientific data that can be difficult to digest, executives far removed from the scene where illegal acts take place should not be subject to such an extreme assumption.³⁶ The effort of understanding environmental law, Lazarus argued, calls for examination of a “multiplicity of obscure sources” that are not limited to law as it is commonly understood by lawyers.³⁷ DOJ should wait, potentially for decades, until environmental law was integrated into more traditional and better developed bodies of law before using the heavy weaponry of the criminal law.³⁸

Lazarus was right that the RCO doctrine establishes culpability for corporate managers who do not directly participate in criminal activities or omissions if those activities are in their area of control and they should have known violations were possible.³⁹ So, for example, in one of the two seminal Supreme Court cases that established the doctrine, *United States v. Dotterweich*,⁴⁰ the government prosecuted the president and general manager of Buffalo Pharmacal under the Federal Food, Drug, and Cosmetic Act,⁴¹ following the shipment of adulterated pharmaceuticals in interstate commerce.⁴² Dotterweich was not accused of actually wrapping the packages himself.⁴³ Rather, the government’s theory was that he had failed to prevent a very serious public welfare offense.⁴⁴ The Supreme Court wrote:

The purposes of this legislation thus touch phases of the lives and health of people which, in the circumstances of modern industrialism, are largely beyond self-protection. Regard for these purposes should infuse construction of the legislation if it is to be treated as a working instrument of government and not merely as a collection of English words. . . . Such legislation dispenses with the

³⁴ Edited Transcripts from the Panel Discussions Held in Phoenix, Arizona on November 3rd and 4th, 1995, *The Goldwater Institute and the Federalist Society: Federalism and Judicial Mandates*, 28 ARIZ. ST. L.J. 17, 112 (1996).

³⁵ Lazarus, *supra* note 33, at 2468–71, 2520.

³⁶ *Id.* at 2428–30, 2520.

³⁷ *Id.* at 2478.

³⁸ *Id.* at 2415–20.

³⁹ See Todd S. Aagaard, *A Fresh Look at the Responsible Relation Doctrine*, 96 J. CRIM. L. & CRIMINOLOGY 1245, 1246 (2006).

⁴⁰ 320 U.S. 277 (1943).

⁴¹ 21 U.S.C. §§ 301–399f (2012).

⁴² Dotterweich, 320 U.S. at 278.

⁴³ *United States v. Buffalo Pharmacal Co.*, 131 F.2d 500, 501 (2d Cir. 1942).

⁴⁴ Dotterweich, 320 U.S. at 278. See Aagaard, *supra* note 39, at 1248–50 (discussing the responsible relation doctrine and how it developed in *Dotterweich* and other case law).

conventional requirement for criminal conduct—awareness of some wrongdoing. In the interest of the larger good it puts the burden of acting at hazard upon a person otherwise innocent but standing in responsible relation to a public danger.⁴⁵

Thirty-two years later, the Court reiterated the RCO doctrine in *United States v. Park*,⁴⁶ a case affirming the criminal culpability of the president of a large national food store chain who received a letter from the Food and Drug Administration (FDA) informing him that one of the company's warehouses was infested with rodents.⁴⁷ Defendant Park delegated the task of eliminating the contamination to an underling who neglected to get it done.⁴⁸ The Court explained the RCO doctrine:

Thus *Dotterweich* and the cases which have followed reveal that in providing sanctions which read and touch the individuals who execute the corporate mission—and this is by no means necessarily confined to a single corporate agent or employee—the Act imposes not only a positive duty to seek out and remedy violations when they occur but also, and primarily, a duty to implement measures that will insure that violations will not occur. The requirements of foresight and vigilance imposed on responsible corporate agents are beyond question demanding, and perhaps onerous, but they are no more stringent than the public has a right to expect of those who voluntarily assume positions of authority in business enterprises whose services and products affect the health and well-being of the public that supports them.⁴⁹

Because they are seminal cases and the Court was less inclined to write mini-treatises on its views when they were decided, *Dotterweich* and *Park* were ambiguous on one crucial point: whether the Court was trying to make it easier for prosecutors to prove that a corporate officer or manager harbored a “guilty mind” (*mens rea*) when an offense was committed or, alternatively, whether the justices were accepting the application of criminal liability to a class of people who had the authority and power to prevent dangerous mistakes that would harm the public. From Professor Lazarus's perspective, however, both possibilities could easily lead to abuse of prosecutorial discretion through the indictment of innocent people who did not realize that they had done something wrong as defined by impenetrable regulations.⁵⁰

Lois Schiffer—then Assistant Attorney General for the Environment and Natural Resources Division within which the Environmental Crimes Section was located and a close colleague of Lazarus—reacted quickly and with strong disagreement to his predictions of abuse, arguing that “(1) the problems that he identifies are more theoretical than real; and (2) the

⁴⁵ *Dotterweich*, 320 U.S. at 280–81.

⁴⁶ 421 U.S. 658 (1975).

⁴⁷ *Id.* at 677–78.

⁴⁸ *Id.* at 663.

⁴⁹ *Id.* at 672.

⁵⁰ Lazarus, *supra* note 33, at 2487.

proposed changes—the consequences of which are largely unconsidered in the article—would seriously undermine legitimate law enforcement.”⁵¹ At the end of the day, as I hope to show in a moment, Schiffer was proven right because DOJ’s inherent conservatism drove it to reject the criminal prosecution alternative in all but the most egregious cases.

Unfortunately, the academic literature that followed Lazarus is a mish-mash of confusing interpretations. Several scholars pursued the argument that *Dotterweich*, *Park*, and their progeny affect the prosecutor’s burden of proving mens rea at the time of the crime.⁵² They contended that the cases make it too easy to climb the corporate chain and indict senior officials who, in large corporations, cannot possibly be expected to understand the convoluted nuances of health, safety, and environmental offenses.⁵³ They claimed that simply by occupying a position of responsibility within a large and complex company, executives who are little more than innocent bystanders could be held criminally culpable for activities that occur far outside the reasonable scope of their knowledge.⁵⁴

This alarmist approach is as theoretically flawed as it is factually baseless. The RCO doctrine is more correctly viewed as a statement about what category of individual defendant is appropriately targeted by the criminal law, assuming that the mens rea and actus rea elements of such offenses can be independently proven. As Professor Todd Aagaard has explained quite eloquently, the doctrine does not supplant proof of mens rea but instead imposes a responsibility on senior executives to prevent serious violations.⁵⁵ This interpretation is confirmed by the explicit language of the Clean Air Act, which states in a definitional section: “For the purpose of this subsection, the term ‘person’ includes, in addition to the entities referred to in section 7602(e) of this title [containing definitions], any responsible corporate officer.”⁵⁶

The criticism that the RCO doctrine undermines fundamental fairness by allowing prosecutors to convict on the basis of executive status and not actual guilt also overlooks the fact that mens rea is judged by a reasonable person standard.⁵⁷ Or, in other words, prosecutors need not secure a confession that a person knew what they were doing was wrong, but rather may show, by circumstantial evidence if necessary, that any reasonable person would realize that the result of the behavior, including reckless indifference to likely consequences, would produce a violent result.⁵⁸ This

⁵¹ Lois J. Schiffer & James F. Simon, *The Reality of Prosecuting Environmental Criminals: A Response to Professor Lazarus*, 83 GEO. L.J. 2531, 2531 (1995).

⁵² See, e.g., Lisa Ann Harig, *Ignorance Is Not Bliss: Responsible Corporate Officers Convicted of Environmental Crimes and the Federal Sentencing Guidelines*, 42 DUKE L.J. 145, 147 (1992); Ruth Ann Weidel et al., *The Erosion of Mens Rea in Environmental Criminal Prosecutions*, 21 SETON HALL L. REV. 1100, 1105 (1991).

⁵³ Harig, *supra* note 52, at 150–51.

⁵⁴ *Id.*

⁵⁵ Aagaard, *supra* note 39, at 1253.

⁵⁶ Clean Air Act, 42 U.S.C. § 7413(c)(6) (2012).

⁵⁷ MODEL PENAL CODE § 2.02(2)(d) (1985).

⁵⁸ *Id.*

critical distinction makes it possible for prosecutors to bring criminal charges based on willful blindness or recklessness, both long-standing varieties of mens rea and of extraordinary importance to the prosecution of senior corporate managers in appropriate circumstances.⁵⁹

Fast forward twenty years, and we discover that the debate over the propriety of criminal prosecutions has been overtaken by events. DOJ brought appropriate prosecutions against deserving targets and rarely overreached. When it did, trial and appellate courts stood ready to overturn convictions, as they have done throughout the nation's history, especially with respect to emerging challenges for the criminal law (e.g., securities manipulation, terrorism, and cybercrime).

Meanwhile, back at the source of the inspections that verify corporate compliance or furnish the foundation for civil and criminal enforcement, all was not well. The core agencies charged with responsibility to protect public health, worker and consumer safety, and the environment were buffeted by budget cuts, as well as two waves of very serious efforts to impose regulatory reforms that swamped them in waves of new analyses and critical White House oversight of their every controversial move.⁶⁰ As the Tea Party and other conservative candidates were elected in large numbers to Congress, the first six years of the Obama Administration turned into a retreat on many fronts. EPA's personnel levels are at their lowest level since 1989, which was before enactment of the most ambitious piece of environmental law ever—the 1990 Clean Air Act Amendments.⁶¹ The agency plans a forty to fifty percent reduction in inspections and enforcement cases over the next five years as a result.⁶² Climate change legislation failed in Congress.⁶³ EPA's efforts to cut back on ozone, or smog, in the inner city were pulled and shelved in advance of the 2010 election.⁶⁴ The agency's

⁵⁹ For a discussion of these issues, see Ira P. Robbins, *The Ostrich Instruction: Deliberate Ignorance as a Criminal Mens Rea*, 81 J. CRIM. L. & CRIMINOLOGY 191 (1990).

⁶⁰ For a thorough discussion of this history and the issues, see generally Rena Steinzor, *The Case for Abolishing Centralized White House Regulatory Review*, 1 MICH. J. ENVTL. & ADMIN. L. 209 (2012), and RENA STEINZOR & SIDNEY SHAPIRO, *THE PEOPLE'S AGENTS AND THE BATTLE TO PROTECT THE AMERICAN PUBLIC: SPECIAL INTERESTS, GOVERNMENT, AND THREATS TO HEALTH, SAFETY, AND THE ENVIRONMENT* (2010).

⁶¹ Ronald White, *Congress Slashes EPA Budget Again Despite Strong Public Support for Strengthening Health Protections*, CENTER FOR EFFECTIVE GOVERNMENT, Jan. 12, 2014, <http://www.foreffectivegov.org/blog/congress-slashes-epa-budget-again-despite-strong-public-support-strengthening-health-protection> (last visited Feb. 13, 2016); Clean Air Act Amendments of 1990, Pub. L. No. 101-549, 104 Stat. 2399 (1990).

⁶² White, *supra* note 61.

⁶³ Ryan Lizza, *As the World Burns: How the Senate and the White House Missed Their Best Chance to Deal with Climate Change*, NEW YORKER, Oct. 11, 2010, <http://www.newyorker.com/magazine/2010/10/11/as-the-world-burns> (last visited Feb. 13, 2016).

⁶⁴ Juliet Eilperin, *Obama Pulls Back Proposed Smog Standards in Victory for Business*, WASH. POST, Sept. 2, 2011, https://www.washingtonpost.com/national/health-science/obama-pulls-back-proposed-smog-standards-in-victory-for-business/2011/09/02/gIQAisTiwJ_story.html (last visited Feb. 13, 2016). The standard was repropounded in 2015 but will take many years to implement, not least because it has been challenged in court. Coral Davenport, *New Limit for Smog-Causing Emissions Isn't as Strict as Many Had Expected*, N.Y. TIMES, Oct. 1, 2015, <http://www.nytimes.com/2015/10/02/us/politics/epa-to-unveil-new-limit-for-smog-causing-ozone->

efforts to clarify its jurisdiction over wetlands and other bodies of water that sometimes are dry were thrown into a maze of litigation.⁶⁵ I could go on and on. In this fraught space, the kinds of industrial disasters that inspired the enactment of the major statutes in the first place reemerged, and the criminal law progressed from an alternative implemented only on occasion to a mainstay of the enforcement that is so crucial to achieving the deterrence of reckless conduct—and therefore the prevention of harm—that the laws were intended to deliver.

I offer two examples of such prosecutions to demonstrate not just the importance of the criminal law in restoring momentum on protecting the environment but also why the RCO doctrine is so important now and in the future.

III. BRITISH PETROLEUM AND THE OIL INDUSTRY

The Deepwater Horizon blowout reminds us that although the United States has exported a large portion of its manufacturing footprint to southeast Asia, we are still engaged in high-hazard enterprises that threaten workers, public health, and the environment every day.⁶⁶ Perhaps the greatest danger posed by such activities is the simultaneous downward trajectory of the government's oversight capacity and the oil and gas industry's tolerance of escalating levels of risk.

A. *Dollar Wise and Risk Tolerant*

On the roster of companies responsible for the worst fiascos since the advent of industrialization, British Petroleum (BP) overachieves. The blowout of the Macondo well and the resulting collapse of the Deepwater Horizon oil rig killed eleven and deposited 4.1 million barrels of crude oil into the Gulf of Mexico over the course of eighty-seven days.⁶⁷ The rig was owned by Transocean and leased by BP and they shared responsibility for

emissions.html (last visited Feb. 13, 2016); Devin Henry, *Coal Company Sues over "Destructive" EPA Ozone Standards*, HILL, Oct. 26, 2015, <http://thehill.com/policy/energy-environment/258129-coal-company-sues-over-epa-ozone-standards> (last visited Feb. 13, 2016).

⁶⁵ Coral Davenport, *Obama Announces New Rule Limiting Water Pollution*, N.Y. TIMES, May 27, 2015, <http://www.nytimes.com/2015/05/28/us/obama-epa-clean-water-pollution.html> (last visited Feb. 13, 2016); Timothy Cama, *27 States Challenge Obama Water Rule in Court*, HILL, June 30, 2015, <http://thehill.com/policy/energy-environment/246539-27-states-challenge-obama-water-rule-in-court> (last visited Feb. 13, 2016).

⁶⁶ The best resources for learning about the history of BP's operations in America and the Deepwater Horizon disaster are a documentary by the PBS program *Frontline* entitled *The Spill*, and a book by a ProPublica reporter who worked with Frontline reporters on that film. See Frontline & ProPublica, *The Spill* (PBS television broadcast Oct. 26, 2010), available at <http://www.pbs.org/wgbh/pages/frontline/the-spill/>; ABRAHM LUSTGARTEN, *RUN TO FAILURE: BP AND THE MAKING OF THE DEEPWATER HORIZON DISASTER* (2012).

⁶⁷ LUSTGARTEN, *supra* note 66, at 331–32 (noting estimates of 200 million gallons of crude released, which rounds to approximately 4.8 million barrels).

the disaster.⁶⁸ But to the extent that any single company dominated the bad decisions that led to the disaster, BP was clearly in the lead.

Remarkably, the Deepwater Horizon disaster was not the first fatal and environmentally destructive incident that cast BP as the villain and was featured in the national media. In 2005, another explosion at the company's Texas City refinery killed fifteen and injured 180.⁶⁹ That same month, BP's \$5 billion Gulf Coast production platform known as "Thunder Horse" tipped at a sharp angle toward the sea because a valve was installed backwards.⁷⁰ In March 2006, a pipeline spill deposited over 200,000 gallons of oil on Alaska's North Slope.⁷¹ Regulators reached civil and criminal settlements with the company, some for amounts in the tens of millions of dollars.⁷² None made a dent in BP upper management's determination to dominate the global oil industry.

BP CEO Lord John Browne, a larger than life figure who still retains great influence in the business world, was determined to transform BP into the world's largest oil company.⁷³ Browne and his management team, nicknamed the "Ninja Turtles,"⁷⁴ acquired companies like Amoco and Atlantic Richfield at huge expense and then cut operating costs dramatically to reduce the large debt on its books.⁷⁵ In fact, the Texas City refinery was part of the Amoco purchase.⁷⁶ BP's top executives were fully aware that the plant had been "run to failure" and needed expensive upgrades, but instead decided to slash its maintenance and renovation costs to the bone.⁷⁷

Soon, warning signs appeared that better financials existed at the expense of safe and efficient operations. Hundreds of millions in deferred maintenance costs were mounting.⁷⁸ Equipment that was well past its

⁶⁸ *Id.* at x.

⁶⁹ For an excellent explanation of the causes of that disaster, see ANDREW HOPKINS, FAILURE TO LEARN: THE BP TEXAS CITY REFINERY DISASTER (2008).

⁷⁰ Sarah Lyall, *In BP's Record, A History of Boldness and Costly Blunders*, N.Y. TIMES, July 12, 2010, <http://www.nytimes.com/2010/07/13/business/energy-environment/13bprisk.html> (last visited Feb. 13, 2016).

⁷¹ Felicity Barringer, *Large Oil Spill in Alaska Went Undetected for Days*, N.Y. TIMES, Mar. 15, 2006, <http://www.nytimes.com/2006/03/15/national/15spill.html> (last visited Feb. 13, 2016).

⁷² For a comprehensive listing of BP enforcement actions, with links to original documentation, see Philip Mattera, *BP: Corporate Rap Sheet*, CORPORATE RESEARCH PROJECT, <http://www.corp-research.org/BP> (last visited Feb. 13, 2016).

⁷³ Lyall, *supra* note 70.

⁷⁴ Roland Gribben, *Turtle Triumph as Young Ninja Takes Over at BP*, TELEGRAPH, Jan. 16, 2007, <http://www.telegraph.co.uk/finance/2802758/Turtle-triumph-as-young-ninja-takes-over-at-BP.html> (last visited Feb. 13, 2016).

⁷⁵ Lyall, *supra* note 70.

⁷⁶ BP Global, *BP Completes Sale of Texas City Refinery, Feb. 1, 2013*, <http://www.bp.com/en/global/corporate/press/press-releases/bp-completes-sale-of-texas-city-refinery-and-related-assets-to-marathon-petroleum.html> (last visited Feb. 13, 2016).

⁷⁷ "Run to failure" or "milking the plant" are colloquial terms well known in the business community to reflect the practice of neglecting maintenance for long periods until an executive on his way up in an organization migrates to a better job and avoids responsibility for addressing the steep costs of the practice. See, e.g., ROBERT JACKALL, MORAL MAZES: THE WORLD OF CORPORATE MANAGERS 96–97 (2010); WHY NOT JAIL?, *supra* note 19, at 83.

⁷⁸ WHY NOT JAIL?, *supra* note 19, at 100.

expected life became hazardous.⁷⁹ Because corporate culture was dollar wise but risk tolerant, pressure to curtail cost overruns compounded the lack of maintenance and training, leading directly to the final denouement.

B. Blowout

The Deepwater Horizon movable oil rig was enormous, costing \$350 million, weighing in at 33,000 tons, and looming twenty stories above the sea.⁸⁰ BP paid the princely sum of \$1 million per day to lease the rig, generating tremendous pressure on midlevel managers to speed up work so that challenging tasks of drilling Macondo and temporarily closing the well were completed on time.⁸¹ But, as so often happens, they were thwarted by nature. The Macondo well field posed exceptionally difficult geological challenges to the point that workers on the rig started referring to it as the “nightmare well” or “the well from hell.”⁸²

The schedule for completion of the project called for fifty-one days of drilling at a cost of \$96.2 million, but this deadline had slipped by six weeks with a cost overrun of \$58 million as of April 20, 2010, the day of the blowout.⁸³ That morning, the Transocean crew, in consultation with the onsite BP company men and a large group of BP engineers based in Houston, Texas, decided they were ready to finish the temporary abandonment of the well.⁸⁴ This operation withdraws the drilling equipment and seals the well hole with waterproof cement, but leaves the riser pipe that extends from the surface through the ocean floor to the bottom of the well in place.⁸⁵ The Deepwater Horizon would then be towed to its next job.⁸⁶ Eventually, BP would install a permanent production platform to extract the oil.⁸⁷

The Macondo well was drilled to a total depth of 18,360 feet below sea level, an astounding engineering feat in and of itself.⁸⁸ At that depth, oil and gas are contained within the earth under tremendous pressure. To prevent the “kicks”—or explosive releases—that can occur once drilling reaches volatile hydrocarbon deposits, crews pour “drilling mud”—a viscous sludge twice the weight of water—down the pipe.⁸⁹ Drilling mud is constantly recirculated in a deepwater well.⁹⁰ When it reaches the rig, equipment filters

⁷⁹ For a description of how this strategy manifested itself in the mid-2000s, *id.* at 99–126.

⁸⁰ NAT'L COMM'N ON THE BP DEEPWATER HORIZON OIL SPILL AND OFFSHORE DRILLING, DEEP WATER: THE GULF OIL DISASTER AND THE FUTURE OF OFFSHORE DRILLING 1–2 (2011), *available at* <http://www.gpo.gov/fdsys/pkg/GPO-OILCOMMISSION/pdf/GPO-OILCOMMISSION.pdf>.

⁸¹ *Id.* at 2.

⁸² *Id.*

⁸³ *Id.*

⁸⁴ *Id.* at 3–4.

⁸⁵ *Id.* at 7.

⁸⁶ *Id.* at 4.

⁸⁷ *Id.*

⁸⁸ *Id.* at 94.

⁸⁹ *Id.* at 91–92.

⁹⁰ *Id.* at 91.

out chunks of rock and other debris displaced by the drilling and the mud is then pumped back into the pipe.⁹¹ The influx and extraction of mud must be done very carefully because if the pipe is overloaded, it sways, running the risk that it will crack and require rebuilding.⁹² If a kick occurs and is large enough, it displaces the drilling mud and seawater inside the pipes, traveling at great speed to the surface.⁹³ It erupts within the rig and can catch fire and explode.⁹⁴ A massive eruption, known as a blowout, is exactly what happened on April 20, 2010.⁹⁵

After an extensive investigation, the National Commission on the BP Deepwater Horizon Spill (Oil Spill Commission) concluded that the crew aboard the rig, and the engineers that were supporting them in Houston, Texas, made several critical mistakes in the days leading up to the blowout.⁹⁶ Readers with a more technical bent can refer to that report for a detailed description of how those mistakes accumulated, causing the destruction of the rig. Even more interesting, however, from the perspective of criminal culpability, is the management system that produced those mistakes, because it exemplifies both BP's greed and recklessness as an institution and the strange way accountability is diffused on board oil rigs and platforms.

Of course, everyone involved in the decision making offshore and onshore had a comprehensive understanding of the dangers involved in drilling an oil well in very deep water, at least at an intellectual level. Temporarily capping a well is as challenging and requires as much care as drilling the well in the first place.⁹⁷ One might suppose that this process would be controlled by well-trained teams organized in a hierarchical structure with one experienced and specially trained senior person responsible for commanding the entire operation. One might also think that a team of technical experts would travel to the rig during the critical two-week period when a well was being closed so that the crew that is normally onboard would have adequate supervision. These suppositions are wrong.

Instead, a kind of Montessori-style free-for-all prevailed, with employees from five separate companies contributing little pieces to the larger decision-making process without any single individual keeping track of how everything fit together.⁹⁸ No single person had the responsibility and authority to ensure a safe and effective operation. Engineering decisions were sporadically referred to BP's onshore engineering unit in Houston, often by electronic mail with numerous recipients asked to register any disagreement with a judgment.⁹⁹ Because they were not required to go on

⁹¹ *Id.*

⁹² *Id.*

⁹³ *Id.* at 109.

⁹⁴ *Id.* at 115.

⁹⁵ *Id.*

⁹⁶ *Id.* at 125.

⁹⁷ *See id.* at 103–04 (describing the temporary abandonment process).

⁹⁸ *Id.* at 122–26.

⁹⁹ *See*, WHY NOT JAIL?, *supra* note 19, at 171 (citing Andrew Hopkins, DISASTROUS DECISIONS: THE HUMAN AND ORGANISATIONAL CAUSES OF THE GULF OF MEXICO BLOWOUT (2012)).

record in support or opposition, some engineers neglected to open the lengthy attachments that accompanied this disembodied method of communication and never responded to the messages.¹⁰⁰ None of these people would knowingly risk their own lives, and employees working onshore—generally white collar professionals—also had ample incentives to prevent a blowout. But, this ad hoc process was acutely dysfunctional.

BP's anxiety about costs compounded this very bad dynamic. The Oil Spill Commission produced a damning chart of nine "Decisions That Increased Risk At Macondo While Potentially Saving Time."¹⁰¹ Most were attributed to BP personnel.¹⁰² If one studies the details of BP's malfeasance over time—at Texas City, with regard to its multibillion-dollar investment in Thunder Horse, and on the North Slope—the conviction grows that top management was fostering the antithesis of a safety culture. Yet as tempting as it is to dismiss the entire disaster to BP's aberrant behavior, as its major competitors have suggested, the Oil Spill Commission disagreed.

C. BP as Rogue

BP's high wire act came to an abrupt halt when the Macondo well blew out. The company sold \$38 billion in assets to pay for spill cleanup.¹⁰³ It signed a criminal settlement resolving multiple counts of federal criminal violations, paying a stratospheric \$4 billion in fines.¹⁰⁴ Two top executives lost their jobs in the wake of the spill: Tony Hayward, the company's chief executive officer, and Andy Inglis, his number two, who was in charge of business development.¹⁰⁵ The reasons why they were fired were never attributed to their tolerance of long-term, reckless operations, but instead were explained as bad public relations during efforts to contain the spill.¹⁰⁶

¹⁰⁰ See David Hammer, *5 Key Human Errors, Colossal Mechanical Failure Led to Gulf Oil Rig Blowout*, TIMES-PICAYUNE, Sept. 5, 2010, http://www.nola.com/news/gulf-oil-spill/index.ssf/2010/09/5_key_human_errors_colossal_me.html (last visited Feb. 13, 2016) (indicating that BP engineers failed to see a warning related to cementing that was buried in a report attached to an email).

¹⁰¹ NAT'L COMM'N ON THE BP DEEPWATER HORIZON OIL SPILL AND OFFSHORE DRILLING, *supra* note 80, at 125.

¹⁰² *Id.*

¹⁰³ Emily Pickrell, *BP's Pockets are Jingling as Assets Sold*, FUEL FIX, Aug. 27, 2012, <http://fuelfix.com/blog/2012/08/27/bp%E2%80%99s-pockets-are-jingling-as-assets-sold/> (last visited Feb. 13, 2016).

¹⁰⁴ Steven Mufson, *BP Settles Criminal Charges for \$4 Billion in Spill; Supervisors Indicted on Manslaughter*, WASH. POST, Nov. 15, 2012, https://www.washingtonpost.com/business/economy/bp-to-pay-billions-in-gulf-oil-spill-settlement/2012/11/15/ba0b783a-2f2e-11e2-9f50-0308e1e75445_story.html (last visited Feb. 13, 2016).

¹⁰⁵ Rob Davies, *BP Plays Safe as Inglis Pays Price for Spill*, THIS IS MONEY, Sept. 29, 2010, <http://www.thisismoney.co.uk/money/article-1316326/BP-plays-safe-Inglis-pays-price-spill.html> (last visited Feb. 13, 2016); Brian Walsh, *Oil Spill: Goodbye, Mr. Hayward*, TIME, July 25, 2010, <http://science.time.com/2010/07/25/oil-spill-goodbye-mr-hayward/> (last visited Feb. 13, 2016).

¹⁰⁶ Terry Macalister, *BP Boss Tony Hayward Faces Fresh Speculation over Losing Job*, GUARDIAN, June 3, 2010, <http://www.theguardian.com/business/2010/jun/03/bp-tony-hayward-speculation-job-loss> (last visited Feb. 13, 2016).

DOJ also obtained indictments against BP midlevel managers Robert Kaluza and Donald Vidrine, the well supervisors or “company men” aboard the Deepwater Horizon, for actions that led to the spill, charging them with felony counts for each of the eleven men who died and misdemeanor counts under the Clean Water Act.¹⁰⁷ In December 2015, the manslaughter charges were dropped.¹⁰⁸ Vidrine settled with DOJ, but Kaluza is on his way to trial. No one higher up the chain of responsibility has been indicted. We will never know whether upper-level managers were even investigated, but DOJ’s hesitance to enforce the responsible corporate officer (RCO) doctrine is very disappointing.

BP was forced to abandon the dream of becoming the world’s largest oil company although it is beginning to return to normal operation presumably with far stricter safety protocols.¹⁰⁹ Even if it manages to avoid another destructive incident, the question is whether the high price of BP’s malfeasance is sufficient to deter other giants in the oil industry. BP’s competitors have engaged in a blatantly self-serving campaign to persuade the public that BP is a rogue, in an effort to discourage more stringent regulation of the other oil industry players, and that narrative is as comforting as it is illusory.¹¹⁰

The Oil Spill Commission firmly rejected the rogue hypothesis:

The immediate causes of the Macondo well blowout can be traced to a series of identifiable mistakes made by BP, Halliburton, and Transocean that reveal such systematic failures in risk management that they place in doubt the safety culture of the entire industry.¹¹¹

Congress did not respond to this finding by passing a new law that would strengthen the regulatory regime that governs such high hazard operations. Nor did it markedly increase the budget of the agency responsible for inspecting such facilities, the Bureau of Safety and Environmental Enforcement (BSEE), which is located within the Department of Interior. In

¹⁰⁷ Andy Grimm, *BP Oil Spill: Criminal Cases Largely Unresolved 5 Years After Deepwater Horizon Blowout*, TIMES-PICAYUNE, Apr. 17, 2015, http://www.nola.com/environment/index.ssf/2015/04/bp_oil_spill_criminal_cases_la.html (last visited Feb. 13, 2016).

¹⁰⁸ Michael Kunzelman, *Judge Rules Out Mentions of Deaths at BP Supervisor’s Trial*, THE BIG STORY, Feb. 4, 2016, <http://bigstory.ap.org/article/0214ae2d16d04443897a05903ed95ac1/judge-rules-out-mentions-deaths-bp-supervisors-trial> (last visited Feb. 24, 2016).

¹⁰⁹ Stanley Reed, *At BP, There’s Optimism in the Corner Office*, N.Y. TIMES, Jan. 24, 2014, <http://www.nytimes.com/2014/01/25/business/energy-environment/bp-still-struggling-to-put-gulf-spill-behind-it.html> (last visited Feb. 13, 2016).

¹¹⁰ John M. Broder, *Oil Executives Break Ranks and Criticize BP at Congressional Hearing*, N.Y. TIMES, June 16, 2010, at A20 (“The chairmen of four of the world’s largest oil companies broke their nearly two-month silence on the major spill in the Gulf of Mexico on Tuesday and publicly blamed BP for mishandling the well that caused the disaster. Seeking to insulate their companies from the continuing crisis in the gulf and the political backlash in Washington, the leaders of Exxon Mobil, Chevron, Shell and ConocoPhillips insisted at a Congressional hearing that they would not have made the mistakes that led to the well explosion and the deaths of 11 rig workers on April 20.”).

¹¹¹ NAT’L COMM’N ON THE BP DEEPWATER HORIZON OIL SPILL AND OFFSHORE DRILLING, *supra* note 80, at vii.

fiscal year 2014, BSEE had 818 full-time equivalent (FTE) employees who were responsible for overseeing deepwater exploration and production in the Outer Continental Shelf, which includes the Gulf of Mexico, California, and Alaska, including about 3,000 platforms and rigs.¹¹² Offshore wells account for seventeen percent of U.S. crude oil production.¹¹³

The failure to dramatically increase oversight of deep well production in the wake of the Deepwater Horizon catastrophe is made more troubling by the continuous extension of risk. For example, a \$3 billion Royal Dutch Shell platform called the Perdido, a Spanish word meaning lost, operates 200 miles offshore in water 8,000 feet deep.¹¹⁴ As Edward Chow, a former industry executive who is now a senior fellow at the Center for Strategic and International Studies told the *New York Times*: “Our ability to manage risks hasn’t caught up with our ability to explore and produce in deep water. . . . The question now is, how are we going to protect against a blowout as well as all of the other associated risks offshore?”¹¹⁵

IV. VW’S MANIACAL CHEAT

If BP’s Deepwater Horizon disaster is emblematic of what happens in a high-hazard industry when self-regulation prevails, the emerging VW scandal demonstrates how a company with overweening confidence in its technological prowess and no apparent fear of discovery can pull off what can only be described as a regulatory heist. This hubris had what looks in retrospect like an amazing run: seven years of escaping detection in a system with routine testing and relatively strong enforcement.

A. Eleven Million Cars, Sixty Premature Deaths, Thirty-Five Percent of Share Value, and Counting

VW’s marketing strategy in the United States was to promote the image that it is an iconoclast.¹¹⁶ In the land of lumbering SUVs and stodgy minivans,

¹¹² See BUREAU OF SAFETY & ENVTL. ENFORCEMENT, U.S. DEP’T OF THE INTERIOR, BUDGET JUSTIFICATIONS AND PERFORMANCE INFORMATION FISCAL YEAR 2015 3 (2015), available at http://www.bsee.gov/uploadedFiles/BSEE/About_BSEE/Budget/00000%20BSEE%20FY%202015%20Final%20Greenbook%20File.pdf (listing number of FTE employees for FY 2014); see also Bureau of Safety & Envtl. Enforcement, *Fact Sheet: Oil and Gas Production Safety Systems Proposed Rule*, <http://www.bsee.gov/BSEE-Newsroom/BSEE-Fact-Sheet/Fact-Sheet-for-Safety-Systems-Proposed-Rule/> (last visited Feb. 13, 2016) (noting the number of platforms and rigs on the Outer Continental Shelf).

¹¹³ U.S. Energy Info. Admin., *Gulf of Mexico Fact Sheet*, July 2, 2015, http://www.eia.gov/special/gulf_of_mexico/data.cfm#petroleum_fuel_facts (last visited Feb. 13, 2016).

¹¹⁴ Jad Mouawad & Barry Meier, *Risk-Taking Rises to New Levels as Oil Rigs in Gulf Drill Deeper*, N.Y. TIMES, Aug. 29, 2010, <http://www.nytimes.com/2010/08/30/business/energy-environment/30deep.html> (last visited Feb. 13, 2016).

¹¹⁵ *Id.*

¹¹⁶ See Dale Buss, *Volkswagen Grows Up with New “Why VW” Marketing Campaign*, FORBES, Sept. 18, 2012, <http://www.forbes.com/sites/dalebuss/2012/09/18/volkswagen-grows-up-with-new-why-vw-marketing-campaign/#4b3e705231d5> (last visited Feb. 13, 2016) (discussing VW’s marketing campaign before the defeat devices were discovered, which was meant to

it sold frisky, little, fuel-efficient, diesel cars named the Rabbit and the Beetle for people who are as proud of their social consciousness as they are thrifty.¹¹⁷ The image grew via a series of tongue-in-cheek, deliberately humorous advertisements. For example, a television advertisement shown during the 2014 Super Bowl shows a jovial dad and his sulky teenage daughter riding along in their VW just as the odometer changes to 100,000.¹¹⁸ The father tells the child that this milestone is very significant and asks what she would say if he told her that every time a VW car hits it, a German engineer “gets his wings.”¹¹⁹ A chirpy, little, polka-like tune starts to play and a series of men in white coats wearing safety glasses and hard hats suddenly sprout very large sets of white, feathered angel’s wings with appropriate parachute-opening sound effects.¹²⁰

Had the brand been less self-consciously righteous, EPA’s public announcement at the end of September 2015 that VW had installed software that turned off “air emission control devices” (AECD) in 500,000 cars driven in America might have inspired somewhat less outrage.¹²¹ Yet given such strong branding, people felt betrayed as well as cheated. In Europe, matters went from bad to worse when the company acknowledged that 10.5 million cars were affected worldwide, most of them on that continent.¹²² Six weeks later, another large shoe dropped when the company admitted to underestimating emissions of carbon dioxide (CO₂), a cause of climate change, and overstating fuel economy for 800,000 European vehicles.¹²³ EPA also announced that it had discovered a second suspect software program on 2016 models, although VW denied that the program violated the law.¹²⁴

The U.S. DOJ immediately launched a criminal investigation.¹²⁵ Authorities in thirty states opened their own inquiries and the plaintiffs’ bar filed lawsuits for consumer damages across the country.¹²⁶ German

“encourage ‘storytelling’ about the VW brand, ‘values’ and vehicles, and to spark social-media conversation”).

¹¹⁷ For example, characteristics of the Beetle including its technical features, size, and shape set it apart from American vehicles. See BERNHARD RIEGER, *THE PEOPLE’S CAR: A GLOBAL HISTORY OF THE VOLKSWAGEN BEETLE* 199, 204–05 (2013) (“The Volkswagen’s success was connected to a nascent, middle-class consumer reform movement that began to articulate itself in the mid-fifties and castigated conspicuous consumption as wasteful.”).

¹¹⁸ See Motoren & Mehr, *TV-Spot: Wings—Volkswagen Game Day Commercial—Super Bowl 2014*, YOUTUBE, <https://www.youtube.com/watch?v=S8x7NFYHtm8> (last visited Feb. 13, 2016).

¹¹⁹ *Id.*

¹²⁰ *Id.*

¹²¹ Davenport & Ewing, *supra* note 1.

¹²² Jack Ewing, *Volkswagen Says 11 Million Cars Worldwide Are Affected in Diesel Deception*, N.Y. TIMES, Sept. 22, 2015, <http://www.nytimes.com/2015/09/23/business/international/volkswagen-diesel-car-scandal.html> (last visited Feb. 13, 2016).

¹²³ Jack Ewing & Graham Bowley, *VW Reveals It Misstated Emissions of Gas Cars*, N.Y. TIMES, Nov. 4, 2015, at B1.

¹²⁴ Mike Spector & William Boston, *VW, EPA Spar Over Tests*, WALL ST. J., Nov. 3, 2015, at A1.

¹²⁵ Aruna Viswanatha & Mike Spector, *U.S. Widens Net for VW*, WALL ST. J., Oct. 16, 2015, at B2.

¹²⁶ Danielle Ivory, *Volkswagen Is Targeted in Inquiry by 30 States*, N.Y. TIMES, Oct. 3, 2015, at B2.

authorities began their own inquiry, while in Paris prosecutors raided the company's offices and seized computers.¹²⁷ VW hired an American law firm, Jones Day, to carry out an internal investigation.¹²⁸ Its chief executive officer, Martin Winterkorn, resigned a few days after the first scandal broke, and was replaced by Matthias Müller, who came from Porsche, another VW brand.¹²⁹

VW employs 593,000 workers worldwide, and by some accounts is the backbone of the German economy.¹³⁰ The company's share value fell by thirty-five percent within a few days of the announcement.¹³¹ The diesel scandal may cost the company \$7.5 billion and the CO₂ and fuel efficiency scandal another \$2.2 billion.¹³² Its mother country was thrown into something approaching panic, much as Britain had been in the wake of the Deepwater Horizon explosion.¹³³

At this early stage, details about which VW executives knew what and when are not yet clear, although the company appeared to be working hard to throw various senior engineers under the proverbial bus to deflect closer scrutiny of its marketing, financial, and sales executives.¹³⁴ Without a doubt, skilled software engineers were summoned to the rescue when someone senior at the company discovered in 2008 that the diesel models the company was counting on to take the American market by storm had AECDS that would not allow the cars to pass U.S. tests.¹³⁵

"The 'cheat device' the engineers designed for diesel cars accomplished the feat of informing onboard emissions control technology when the cars were subjected to an evaluation of its effectiveness at the independent

¹²⁷ Nick Kostov & Jason Chow, *Police Raid Volkswagen Headquarters in France*, WALL ST. J., Oct. 18, 2015, <http://www.wsj.com/articles/police-raid-volkswagens-headquarters-in-france-1445166198> (last visited Feb. 13, 2016).

¹²⁸ Ewing & Bowley, *supra* note 123; *Jones Day*, <http://www.jonesday.com/home.aspx> (last visited Feb. 13, 2016) (Jones Day is among the world's largest law firms, with 2,400 lawyers in offices throughout the world.).

¹²⁹ Jack Ewing, *Rigged Testing by Volkswagen Fells Its C.E.O.*, N.Y. TIMES, Sept. 24, 2015, at A1, B11.

¹³⁰ *Id.*; Richard Milne, *Volkswagen: System Failure*, FIN. TIMES, Nov. 4, 2015, <http://www.ft.com/cms/s/0/47f233f0-816b-11e5-a01c-8650859a4767.html#axzz3rOU5Bjp2> (last visited Feb. 13, 2016).

¹³¹ Tony Czuczka & Arne Delfs, *Volkswagen Too Big to Fail for Germany's Political Classes*, BLOOMBERG BUS., Oct. 1, 2015, <http://www.bloomberg.com/news/articles/2015-10-01/volkswagen-too-big-to-fail-for-germany-s-political-classes> (last visited Feb. 13, 2016).

¹³² Ewing & Bowley, *supra* note 123.

¹³³ See Ruth Bender, *German Minister Heads to U.S. for Talks on Volkswagen Scandal*, WALL ST. J., Oct. 23, 2015, <http://www.wsj.com/articles/german-minister-heads-to-washington-for-talks-on-volkswagen-scandal-1445614488> (last visited Feb. 13, 2016) (noting Berlin's concerns about the implications of the cheating scandal for the German economy).

¹³⁴ Mike Spector & Amy Harder, *Volkswagen U.S. CEO Says He Didn't Know in 2014 of Emissions Defeat Devices*, WALL ST. J., Oct. 9, 2015, <http://www.wsj.com/articles/volkswagen-u-s-ceo-says-he-didnt-know-in-2014-of-emissions-defeat-devices-1444316371> (last visited Feb. 13, 2016).

¹³⁵ William Boston, *VW Probe Targets Engineers*, WALL ST. J., Oct. 5, 2015, at A1, A10; Jack Ewing, *Volkswagen Engine-Rigging Scheme Said to Have Begun in 2008*, N.Y. TIMES, Oct. 4, 2015, <http://www.nytimes.com/2015/10/05/business/engine-shortfall-pushed-volkswagen-to-evade-emissions-testing.html> (last visited Feb. 13, 2016).

testing facilities that periodically certify compliance.”¹³⁶ The rest of the time or, in other words, during every hour of their routine operation, the software turned the AECs off.¹³⁷ As it turns out, “[a] vehicle’s onboard computer can operate in two modes, ‘on road’ and ‘dyno,’” with the second triggered only when the emissions are being tested.¹³⁸ The chief reason why the defeat device was necessary on VW cars was that the company wanted to keep them light and small, and rejected more sophisticated emissions control systems used in heavier vehicles.¹³⁹

The existence of the cheat device was discovered almost by accident, when researchers at West Virginia University were testing fuel efficiency as cars were driven on-road.¹⁴⁰ The study was commissioned by a tiny environmental group trying to document that European air quality standards were more lax than those in the United States.¹⁴¹ Two VW cars happened to end up in the initial mix of models subject to the first tests and the researchers were startled to discover that the cars gave off pollution significantly in excess of the stationary testing standard.¹⁴² The researchers took their findings to EPA and the California Air Resources Board (CARB).¹⁴³ Pinning down the exact nature and location of the cheat devices took considerably more time, and eventually VW was informed of the problem.¹⁴⁴ It stonewalled the two regulatory agencies that spearheaded the investigation: EPA, of course, and CARB.¹⁴⁵ Finally, likely irritated by the company’s arrogant attitude, EPA announced its probe and the news traveled rapidly around the world.¹⁴⁶

In a sense, the fact that regulators got a tip on the problem from independent researchers was a lucky break that does not reflect well on their ability to prevent such violations. The discovery would be more

¹³⁶ RENA STEINZOR, CENTER FOR PROGRESSIVE REFORM, FEDERAL WHITE COLLAR CRIME: SIX CASE STUDIES DRAWN FROM ONGOING PROSECUTIONS TO PROTECT PUBLIC HEALTH, WORKER AND CONSUMER SAFETY, AND THE ENVIRONMENT 25 (Nov. 2015).

¹³⁷ Andrea Peterson & Brian Fung, *The Tech Behind How Volkswagen Tricked Emissions Tests*, WASH. POST, Sept. 22, 2015, <https://www.washingtonpost.com/news/the-switch/wp/2015/09/22/the-tech-behind-how-volkswagen-tricked-emissions-tests/> (last visited Feb. 13, 2016).

¹³⁸ Robert Duffer, *Volkswagen Diesel Scandal: What You Need to Know*, CHI. TRIB., Sept. 22, 2015, <http://www.chicagotribune.com/classified/automotive/ct-volkswagen-diesel-scandal-faq-20150921-story.html> (last visited Feb. 13, 2016).

¹³⁹ Umair Irfan, *Why Volkswagen Declared Defeat in Diesel Cars*, SCI. AM., Oct. 9, 2015, <http://www.scientificamerican.com/article/why-volkswagen-declared-defeat-in-diesel-cars/> (last visited Feb. 13, 2016).

¹⁴⁰ Sonari Glington, *How a Little Lab in West Virginia Caught Volkswagen’s Big Cheat*, NPR, Sept. 24, 2015, <http://www.npr.org/2015/09/24/443053672/how-a-little-lab-in-west-virginia-caught-volkswagens-big-cheat> (last visited Feb. 13, 2016).

¹⁴¹ David Shepardson, *How VW Got Caught Cheating Emissions Tests*, DETROIT NEWS, Sept. 29, 2015, <http://www.detroitnews.com/story/business/autos/foreign/2015/09/24/vw-caught/72715074/> (last visited Feb. 13, 2016).

¹⁴² *Id.*

¹⁴³ *Id.*

¹⁴⁴ *Id.*

¹⁴⁵ Bill Vlasic & Aaron M. Kessler, *It Took E.P.A. Pressure to Get VW to Admit Fault*, N.Y. TIMES, Sept. 22, 2015, at A1, B8.

¹⁴⁶ *See id.*

reassuring had the regulators discovered the problem on their own. After all, the cheat device was in effect for seven years before the company admitted it existed, spewing pollution anywhere from ten to forty times national standards.¹⁴⁷

Although the media has focused disproportionately on the economic implications of VW's malfeasance, the results of the excess pollution sickened people and even triggered premature deaths.¹⁴⁸ The pollutant at stake in the controversy was nitrous oxide (NO_x), a precursor gas that combines with volatile organic compounds to produce ozone or, as it is more commonly known, smog.¹⁴⁹ Excess ozone is primarily a problem in the nation's major metropolitan areas.¹⁵⁰ It is such a serious problem that EPA recently lowered the levels allowed in the ambient air significantly.¹⁵¹

The adverse health effects caused by excessive smog are devastating, especially to the very young, the elderly, or anyone else with compromised respiratory systems.¹⁵² A study conducted in 2013 by the Massachusetts Institute of Technology's Laboratory for Aviation and the Environment found that 200,000 early deaths are caused by ground-level pollution, with emissions from road transportation the most significant cause.¹⁵³ The study further found that vehicle exhaust was a factor in 53,000 deaths.¹⁵⁴

In October 2015, a study by scientists at MIT and Harvard University concluded that VW's cheat device, which resulted in pollution ten to forty times higher than applicable EPA standards, could result in as many as fifty-nine deaths in the United States and impose "social costs" (e.g., illness, days off work and school) up to \$450 million.¹⁵⁵

¹⁴⁷ Benjamin Hulac, *Volkswagen Uses Software to Fool EPA Pollution Tests*, SCI. AM., Sept. 21, 2015, <http://www.scientificamerican.com/article/volkswagen-uses-software-to-fool-epa-pollution-tests/> (last visited Feb. 13, 2016).

¹⁴⁸ See Matthew Freeman, *The Media Is Missing the Most Important Part of the VW Scandal*, <http://www.progressivereform.org/CPRBlog.cfm?idBlog=02473AAB-E967-042C-660887E11956B225> (last visited Feb. 13, 2016) (stating that hundreds have died as a result of VW's willingness to pollute the air and then lie about it).

¹⁴⁹ For a general background on this kind of pollution and the adverse health effects it causes, see U.S. ENVTL. PROT. AGENCY, *SMOG: WHO DOES IT HURT? WHAT YOU NEED TO KNOW ABOUT OZONE AND YOUR HEALTH* (1999), available at <http://www3.epa.gov/airnow/health/smog.pdf>.

¹⁵⁰ U.S. Env'tl. Prot. Agency, *Ground-Level Ozone: Basic Information*, <http://www3.epa.gov/ozonepollution/basic.html> (last visited Feb. 13, 2016).

¹⁵¹ Coral Davenport, *New Limit for Smog-Causing Emissions Isn't as Strict as Many Had Expected*, N.Y. TIMES, Oct. 1, 2015, <http://www.nytimes.com/2015/10/02/us/politics/epa-to-unveil-new-limit-for-smog-causing-ozone-emissions.html> (last visited Feb. 13, 2016).

¹⁵² U.S. Env'tl. Prot. Agency, *Ground-Level Ozone: Health Effects*, <http://www3.epa.gov/ozonepollution/health.html> (last visited Feb. 13, 2016).

¹⁵³ Fabio Caiazza et al., *Air Pollution and Early Deaths in the United States. Part I: Quantifying the Impact of Major Sectors in 2005*, 79 ATMOSPHERIC ENV'T 198, 204 (2013).

¹⁵⁴ *Id.*

¹⁵⁵ Steven R.H. Barrett et al., *Impact of the Volkswagen Emissions Control Defeat Device on US Public Health*, 10 ENVTL. RES. LETTERS 114005, Oct. 19, 2015, at 1, 2, available at <http://iopscience.iop.org/article/10.1088/1748-9326/10/11/114005>.

B. An Eerie Reprise of the Deepwater Horizon

Although VW's scheme did not result in a fireball that killed eleven and soaked one of the world's most fragile ecosystems in oil, the central causes of that quieter fiasco bear a disconcerting resemblance to the arrogance that led to BP's fall. Figure 1, below, compares those characteristics.¹⁵⁶ The chart confirms the conclusion of the previous Section: management problems and lack of oversight by government regulators played the central role in the crises now confronting each company. Both companies were headed by larger-than-life CEOs, who were driving to become the largest company in their industrial sector, exhibiting the kind of pride that often comes before a fall.¹⁵⁷

On November 9, 2015, the international rating service Fitch-Ratings (Fitch) downgraded VW's Long-Term Issuer Default Rating (IDR) to BBB+ from A.¹⁵⁸ "The downgrade reflects the corporate governance, management and internal control issues highlighted by the ongoing emissions test crisis related to up to 11 million diesel-powered vehicles," Fitch declared in its press release.¹⁵⁹ It added that the company's corporate governance was "weaker than that of its main peers" because it had a "blocking minority" of only twenty percent [on its supervisory board] with respect to "voting resolutions," as well as "potential conflicts of interest on the part of some board members, and lack of independence and diversity at the supervisory board level."¹⁶⁰ Fitch added that VW had been slow to make changes regarding its two boards: one labeled as "management" and a second, with superior status, labeled "supervisory."¹⁶¹ Although it commended VW's voluntary disclosure that it had underestimated CO₂ emissions, it said that this problem suggested that further bad news was likely to emerge, comprising "reputational damage" to the company that could undermine its "funding ability."¹⁶² The overall outlook for potential investors was negative.¹⁶³

VW is controlled by four stakeholders: 1) senior management; 2) private investors; 3) representatives of its very powerful union, IG Metall; and 4) the governments of Lower Saxony and Qatar, which, along with original investors from the families that helped found the company, hold a large portion of its shares.¹⁶⁴ The company's executive ranks have been dominated

¹⁵⁶ See *infra* fig.1.

¹⁵⁷ VW became the largest automaker in the world when its sales surpassed Toyota's in 2014. Jad Mouawad, *Volkswagen's Scandal Further Strains Its Relationship with Its U.S. Dealers*, N.Y. TIMES, Oct. 1, 2015, at B2. For further information about Lord Browne's dream, see LUSTGARTEN, *supra* note 66, at 7.

¹⁵⁸ Fitch, *Fitch Downgrades Volkswagen to "BBB+"; Outlook Negative*, <https://www.fitchratings.com/site/fitch-home/pressrelease?id=993669> (last visited Feb. 13, 2016).

¹⁵⁹ *Id.*

¹⁶⁰ *Id.*

¹⁶¹ *Id.*; see also Milne, *supra* note 130 (explaining the hierarchy of VW's boards).

¹⁶² Fitch, *supra* note 158.

¹⁶³ *Id.*

¹⁶⁴ Milne, *supra* note 130.

by the descendants of the families that helped build the company, some going back to its creation by Adolf Hitler in 1936.¹⁶⁵ The British subsequently reorganized the company, and it played a crucial role in Germany's postwar Wirtschaftswunder (economic miracle).¹⁶⁶ Exacerbating these incestuous relationships, the company is supervised by two boards of directors, one that advises management and one that is supposed to be a watchdog for the company as a whole.¹⁶⁷ The vast majority of the members of these boards are insiders who have close ties to existing interest groups, their ability to change the course of the company is weak, and this structure clearly bothered Fitch evaluators.¹⁶⁸

The other source of VW's managerial weakness, critics charge, is its close ties to organized labor, which mean that job losses have been "taboo."¹⁶⁹ The result has been that VW is bloated (with 593,000 workers) compared to its strongest rival, Toyota (with just 344,000); both companies make roughly the same number of cars and until the scandal emerged, VW had inched Toyota out of the top spot as largest automaker in the world.¹⁷⁰

"People are starting to question the whole VW system again . . . VW is among the most complicated and questionably governed companies," Hans Hirt, a director at Hermes Equity Ownership Services, told the *Financial Times*.¹⁷¹ "In other cases, you have strong families. But here you also have state ownership and powerful employees. It is a very special mix."¹⁷² Hermes is an activist investor based in Britain.¹⁷³

When the defeat device scandal emerged, VW's top executives took quick defensive action: they blamed the company's engineers. Michael Horn, head of the VW Group of America, told Congress that "a couple of software engineers" had invented the cheat device.¹⁷⁴ "To my understanding this was not a corporate decision," he added.¹⁷⁵ "This was something individuals did."¹⁷⁶ Until the investigations are finished, this version of reality is difficult to dispute, although it is both self-serving and implausible. At a company the size of VW, with the usual second-guessing at the mid-management level, could two isolated technocrats decide to take such a huge risk—engineering a piece of software that deliberately violates American and European law?

¹⁶⁵ *Id.*; Dietmar Hawranek, *The Porsche Story: A Fierce Family Feud*, SPIEGEL ONLINE, July 21, 2009, <http://www.spiegel.de/international/business/the-porsche-story-a-fierce-family-feud-a-637243-druck.html> (last visited Feb. 13, 2016).

¹⁶⁶ Milne, *supra* note 130.

¹⁶⁷ *Id.*

¹⁶⁸ Fitch, *supra* note 158.

¹⁶⁹ Milne, *supra* note 130 ("Together with the presence of lower Saxony on the board, it meant job losses—particularly at VW's notoriously inefficient main factory next to its headquarters in Wolfsburg—were all but taboo.").

¹⁷⁰ *Id.*; Mouawad, *supra* note 157.

¹⁷¹ Milne, *supra* note 130.

¹⁷² *Id.*

¹⁷³ *Id.*

¹⁷⁴ Spector & Harder, *supra* note 134.

¹⁷⁵ *Id.*

¹⁷⁶ *Id.*

The suspicion that the conspiracy extended further is confirmed by an excellent piece of reporting in the *Wall Street Journal*. VW's determination to push "clean diesel" began a decade ago, under then-CEO Bernd Pischetsrieder, who lured executive Wolfgang Bernhard from rival company Daimler AG and made him the head of the VW brand.¹⁷⁷ Bernhard was also in charge of designing a new diesel engine, dubbed EA-189.¹⁷⁸ He decided to license a superior emissions control system from his old company.¹⁷⁹ Called "BlueTec," the system used urea to scrub emissions and was relatively large and heavy compared to VW's homegrown system.¹⁸⁰ Its further disadvantage was that the consumer had to refill the urea tank periodically.¹⁸¹ As the engine design progressed, a corporate putsch resulted in the expulsion of Pischetsrieder, and Bernhard left soon after.¹⁸² The BlueTec license was cancelled, and VW reverted to its own, less effective system.¹⁸³ Several people were involved in that decision, and it is difficult to imagine that when the VW pollution control equipment failed to satisfy the American standard for NO_x, its replacement by computer software was undertaken by a couple of engineers in a stealth mission.

In the end, VW could be charged with any one of a number of crimes, including wire fraud (for selling cars that did not remotely justify the claims in its many advertisements) and making false statements to the government officials. Ironically, the one criminal charge the company and its executives are likely to escape is violating the Clean Air Act's requirement that all cars used in the United States have operational and effective AECs approved by the government.¹⁸⁴ John Dingell—the longest-serving member of the House of Representatives and a staunch ally of the auto industry—made sure automakers were exempt, arguing, disingenuously, that civil penalties are "easier, speedier, quicker."¹⁸⁵ Fortunately, Senator Richard Blumenthal (D-Conn.), who is still in Congress and is a former attorney general of the state of Connecticut with an excellent record of prosecuting cases to protect consumers and the environment, has stated that "[t]he loophole should be closed."¹⁸⁶

¹⁷⁷ Boston, *supra* note 135, at A10.

¹⁷⁸ *Id.*

¹⁷⁹ *Id.*

¹⁸⁰ *Id.*; Irfan, *supra* note 139 (indicating that diesel engines are traditionally heavier, and that VW sought to create a system that delivered both "fuel economy *and* power" through turbocharged direct injection (emphasis in original)); Green Car Reports, *Adding Urea to Clean Diesel Cars: Can I Just Pee in the Tank?*, BUS. INSIDER, May 24, 2011, <http://businessinsider.com/adding-urea-to-clean-diesel-cars-can-i-just-pee-in-the-tank-2011-5> (last visited Feb. 13, 2016).

¹⁸¹ Green Car Reports, *supra* note 180.

¹⁸² Boston, *supra* note 135, at A10.

¹⁸³ *Id.*

¹⁸⁴ Amy Harder & Aruna Viswanatha, *Volkswagen May Not Face Environmental Criminal Charges*, WALL ST. J., Sept. 29, 2015, <http://www.wsj.com/articles/volkswagen-may-not-face-environmental-criminal-charges-1443567204> (last visited Feb. 13, 2016).

¹⁸⁵ *Id.*

¹⁸⁶ *Id.*

V. CONCLUSION

Legal historian Lawrence Friedman identifies three goals of the criminal law: deterrence, punishment, and the setting of “moral boundaries” to show a society “where the line lies between good and bad.”¹⁸⁷ The third goal is too often overlooked. Its application to renegade companies and their well-compensated executives has become extraordinarily important to the quality of life in the developed and developing worlds.

But white collar criminal prosecutions are not only important because of the immediate effects they can achieve in correcting behavior that harms public health, worker and consumer safety, and the environment. They are also vital to combat the more insidious reality that American justice is no longer blind.

The nation’s 5,000 prisons held about 2.2 million inmates and an additional 4.7 million people were on probation or parole in 2013.¹⁸⁸ Per capita, the United States imprisons 716 out of 100,000 people, more than any other nation, including Russia and China.¹⁸⁹ African American men are six times more likely to be incarcerated than white men.¹⁹⁰ Despite constituting only thirteen percent of the U.S. population, forty percent of the prison population is African American.¹⁹¹ Latinos represent sixteen percent of the overall population but nineteen percent of the prison population.¹⁹² Whites are sixty-four percent of the overall population but only thirty-nine percent of those incarcerated.¹⁹³

Some might imagine that escalating violent crime rates justify a myopic focus on street crime. But the factor that has played the largest role in the rapid growth of prisons and prison populations is the relentless pursuit of minor drug offenses. Over the decade beginning in 2001, eight million people were arrested for marijuana; simple possession charges accounted for eighty-eight percent of this total, and marijuana was the target of fifty-two

¹⁸⁷ FRIEDMAN, *supra* note 25, at 10.

¹⁸⁸ U.S. DEP’T OF JUSTICE, CORRECTIONAL POPULATIONS IN THE UNITED STATES, 2013, 2 (2014), available at <http://www.bjs.gov/content/pub/pdf/cpus13.pdf> (providing 2013 data regarding prison populations); Christopher Ingraham, *The U.S. Has More Jails Than Colleges. Here’s a Map of Where Those Prisoners Live*, WASH. POST, Jan. 6, 2015, <https://www.washingtonpost.com/news/wonk/wp/2015/01/06/the-u-s-has-more-jails-than-colleges-heres-a-map-of-where-those-prisoners-live/> (last visited Feb. 13, 2016) (indicating that the United States has slightly over 5,000 prisons).

¹⁸⁹ ROY WALMSLEY, INT’L CTR. FOR PRISON STUD., WORLD PRISON POPULATION LIST 1 (2013).

¹⁹⁰ Bruce Drake, *Incarceration Gap Widens Between Whites and Blacks*, PEW RESEARCH CTR., Sept. 6, 2013, <http://www.pewresearch.org/fact-tank/2013/09/06/incarceration-gap-between-whites-and-blacks-widens/> (last visited Feb. 13, 2016).

¹⁹¹ Jamal Hagler, *8 Facts You Should Know About the Criminal Justice System and People of Color*, <https://www.americanprogress.org/issues/race/news/2015/05/28/113436/8-facts-you-should-know-about-the-criminal-justice-system-and-people-of-color/> (last visited Feb. 13, 2016).

¹⁹² *Id.*

¹⁹³ *Id.*

percent of all drug arrests.¹⁹⁴ African Americans were 3.73 times more likely to be arrested than whites.¹⁹⁵

At the same time, no individual was prosecuted for contributing to the 2008 recession even as the phenomenon of what has come to be known as “mass incarceration” continues to spiral.¹⁹⁶ The corrosive notion that some financial institutions are “too big to fail”¹⁹⁷ quickly morphed into the idea that corporations in general may be “too big to jail,”¹⁹⁸ further discrediting the system. Despite the spike in prosecutions for egregious health and safety violations I listed at the outset of this Essay, the most common outcome remains payment by corporations of huge fines, dwarfed only by their net revenues.

The clear message of this divided system is that scales of justice, a cornerstone of American democracy, have all but abandoned any effort to treat rich and poor, white or people of color, the same. As important as clean air and water are to all of us, we risk the values that make them possible if these profound inequities are not addressed.

¹⁹⁴ AM. CIVIL LIBERTIES UNION, *THE WAR ON MARIJUANA IN BLACK AND WHITE* 4, 14 (2013), available at <https://www.aclu.org/sites/default/files/assets/090613-mj-report-rfs-re11.pdf>.

¹⁹⁵ *Id.* at 17.

¹⁹⁶ Am. Civil Liberties Union, *Mass Incarceration*, <https://www.aclu.org/issues/mass-incarceration> (last visited Feb. 13, 2016).

¹⁹⁷ ANDREW ROSS SORKIN, *TOO BIG TO FAIL: THE INSIDE STORY OF HOW WALL STREET AND WASHINGTON FOUGHT TO SAVE THE FINANCIAL SYSTEM FROM CRISIS—AND THEMSELVES* 539 (2009).

¹⁹⁸ BRANDON L. GARRETT, *TOO BIG TO JAIL: HOW PROSECUTORS COMPROMISE WITH CORPORATIONS*, 1–2 (2014).

Figure 1: The Parallel Odysseys of BP and VW

Causal Factors	BP	VW
<p>Recidivism: Both companies had scoffed at the law before, without meaningful legal repercussions, and executives seemed to have developed a mindset that whatever civil consequences regulators dished out, executives could manage as a cost of doing business.</p>	<p>Texas City refinery disaster that killed fifteen; spill on the North Slope of Alaska.¹⁹⁹ In the case of the Texas City refinery, Occupational Safety and Health Administration (OSHA) regulators agreed to a settlement that required the company to fix all outstanding problems, but when OSHA returned four years later, they discovered that these requirements were ignored.²⁰⁰ They issued a second consent order imposing \$50.6 million in penalties.²⁰¹</p>	<p>Cheat devices are well-known in the auto industry. Ironically, in 1973, just three years after EPA was created, regulators discovered that VW had installed cheat devices on its cars and EPA imposed a civil penalty of \$120,000.²⁰² From 1991–1995, GM used a cheat device to defeat controls on carbon monoxide; in 1998, Ford installed such devices on its Econoline vans; in 1998, diesel truck owners and operators paid \$1 billion in civil penalties for installing cheat devices to defeat pollution control systems so that long-haul truckers could complete long journeys faster.²⁰³</p>

¹⁹⁹ Press Release, U.S. Dep't of Labor, U.S. Dep't of Labor OSHA Issues Record-Breaking Fines to BP (Oct. 30, 2009), https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=NEWS_RELEASES&p_id=16674 (last visited Feb. 13, 2016).

²⁰⁰ *Id.*

²⁰¹ Press Release, U.S. Dep't of Labor, BP to Pay \$50.6 Million to Resolve U.S. Labor Dep't Litigation (Aug. 12, 2010), https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=NEWS_RELEASES&p_id=18156 (last visited Feb. 13, 2016).

²⁰² Jeff Plungis, *Carmaker Cheating on Emissions Almost as Old as Pollution Tests*, BLOOMBERG, Sept. 23, 2015, <http://www.bloomberg.com/news/articles/2015-09-23/carmaker-cheating-on-emissions-almost-as-old-as-pollution-tests> (last visited Feb. 13, 2016).

²⁰³ Warren Brown & Pierre Thomas, *Emissions Case Costs GM Fine, Cadillac Recall*, WASH. POST, Dec. 1, 1995, <https://www.washingtonpost.com/archive/politics/1995/12/01/emissions-case-costs-gm-fine-cadillac-recall/ba27a350-1b90-4574-a8c7-2a0ad5312e76/> (last visited Feb. 13, 2016) (explaining General Motor's settlement over cheat devices); Joby Warrick, *EPA: Volkswagen Used "Defeat Device" to Illegally Skirt Air-Pollution Controls*, WASH. POST, Sept. 18, 2015, <https://www.washingtonpost.com/news/energy-environment/wp/2015/09/18/epa-volkswagen-used-defeat-device-to-circumvent-air-pollution-controls/> (last visited Feb. 13, 2016) (referring to Ford as an example of automaker's long history of using cheat devices); Naftali Bendavid, *Penalty for Truck Pollution: \$1 Billion*, CHI. TRIB., Oct. 23, 1998, <http://articles.chicagotribune.com>

Causal Factors	BP	VW
<p><u>Driving to Become Number One:</u> Both companies were led by strong, autocratic leaders—BP CEO Lord John Browne and VW CEO Martin Winkterkorn.²⁰⁴ They brooked no opposition in their relentless drive to become the world’s largest oil company or automaker. Ultimately they were successful, but success was short-lived. Both men’s strategies involved rampant cost-cutting.</p>	<p>Under the leadership of Browne, BP acquired competitors (Amoco and Atlantic Richfield), was quite aggressive in the drive to lease property where oil might be discovered, and as a result amassed significant debt.²⁰⁵ To improve the appearance of the company’s balance sheets, top executive team engaged in relentless cost-cutting and deferred maintenance.²⁰⁶ The pressure to cut costs was a major factor in the Macondo Well blowout because temporary abandonment of the well was weeks overdue and BP was leasing the Deepwater Horizon rig for \$1 million/day.²⁰⁷</p>	<p>VW CEO Winkterkorn was determined to penetrate the American market for diesel cars.²⁰⁸ The company had two problems: consumers had little experience with diesels and American pollution laws were significantly more stringent than those in Europe.²⁰⁹ Having decided to reject a more expensive and bulkier pollution control device, VW engineers were under tremendous pressure to develop the cheat in 2007, right before the American diesels rolled off the line.²¹⁰</p>

com/1998-10-23/news/9810230110_1_detroit-diesel-corp-engines-mack-trucks (last visited Feb. 13, 2016) (explaining diesel-engine makers’ settlement over cheat devices).

²⁰⁴ Gribben, *supra* note 74 (describing a memo from Tony Hayward to BP management that finds the leadership “doesn’t listen hard enough to what the bottom of the organisation is saying”); *Volkswagen Executives Describe Authoritarian Culture Under Former CEO*, GUARDIAN, Oct. 10, 2015, <http://www.theguardian.com/business/2015/oct/10/volkswagen-executives-martin-winterkorn-company-culture> (last visited Feb. 13, 2016) (noting that five former executives from VW confirmed Winterkorn’s management style “fostered a climate of fear, an authoritarianism that went unchecked partly due to a company structure unique in the German motor industry”).

²⁰⁵ WHY NOT JAIL?, *supra* note 19, at 99–100.

²⁰⁶ *Id.* at 107, 108 (noting that “[i]ndependent reports emphasized the impact of relentless cost-cutting directives,” and previous accidents are “attributable to a culture that allowed crucial components of the physical plant to ‘run to failure’”).

²⁰⁷ *Id.* at 150.

²⁰⁸ See *supra* text accompanying note 179.

²⁰⁹ Boston, *supra* note 135 (describing American consumers as skeptical of diesel technology and American efforts to tighten emissions standards for diesel engines).

²¹⁰ Ewing, *supra* note 135 (explaining that rather than stopping production of its diesel engines and throwing out years of work and investment, VW devised a cheat in 2008 as it began a push to market clean diesel technology).

Causal Factors	BP	VW
<p><u>Brutal internal culture:</u> Even the most acute crisis did not deflect the drive to become number one.</p>	<p>When a new site director, Don Parus, arrived at the Texas City refinery, he concluded that the facility had \$235 million in deferred repairs that were causing many accidents and even resulting in unnecessary worker deaths. Parus even took the drastic step of presenting a PowerPoint containing photographs of workers killed in plant accidents to John Manzoni, the BP Chief Executive for refining, and Michael Hoffman, group vice president for U.S. refining.²¹¹ Manzoni and Hoffman did not yield. A few months later, an explosion at the refinery killed 15 people.²¹²</p>	<p>VW has been enmeshed in various scandals and internal power struggles. Winterkorn, who took over as CEO in 2007, fought successfully to marginalize opponents and kept an iron grip on the internal operations of the company.²¹³ VW engineers developed a diesel engine they claimed would meet American standards, along the way rejecting a more expensive pollution control technology that would have made better reductions.²¹⁴ When they discovered in 2007 that the engine would not meet American standards, the engineers invented the cheat device software.²¹⁵</p>

²¹¹ Frontline, *BP's Troubled Past*, <http://www.pbs.org/wgbh/pages/frontline/the-spill/bp-troubled-past/> (last visited Feb. 13, 2016); Ryan Knutson, *Blast at BP Texas Refinery in '05 Foreshadowed Gulf Disaster*, PROPUBLICA, July 2, 2010, <http://www.propublica.org/article/blast-at-bp-texas-refinery-in-05-foreshadowed-gulf-disaster> (last visited Feb. 13, 2016).

²¹² Frontline, *supra* note 211.

²¹³ Andreas Cremer & Tom Bergin, *Fear and Respect: VW's Culture Under Winterkorn*, REUTERS, Oct. 10, 2015, <http://www.reuters.com/article/2015/10/10/us-volkswagen-emissions-culture-idUSKCN0S40MT20151010> (last visited Feb. 13, 2016).

²¹⁴ Dune Lawrence et al, *How Could Volkswagen's Top Engineers Not Have Known?*, BLOOMBERG BUS., Oct. 21, 2015, <http://www.bloomberg.com/news/articles/2015-10-21/how-could-volkswagen-s-top-engineers-not-have-known-> (last visited Feb. 13, 2016).

²¹⁵ *Id.*

Causal Factors	BP	VW
<p><u>Foreign Relations Implications:</u> BP stock part of the portfolio of many pension funds in England.²¹⁶ VW employs close to 600,000 workers worldwide, including one in seven German auto workers.²¹⁷ Auto industry central to health of German economy.²¹⁸</p>	<p>British government lobbied White House successfully to drop debarment of BP from federal government contracts in wake of Deepwater Horizon disaster.²¹⁹</p>	<p>VW executives already warning that cheat device scandal is an “existence-threatening crisis for company.”²²⁰ Angela Merkel has remained at arm’s length but may not be able to stay on sidelines once government and private plaintiff cases start moving through the pipeline.²²¹</p>
<p><u>Recalcitrance during Crisis:</u> Neither company cooperated with regulators after the crises erupted until they were forced to get in line.</p>	<p>BP fudged and withheld how much oil was gushing out of the blown out pipe for many weeks.²²² One manager was prosecuted for lying to the government about these figures.²²³</p>	<p>VW stalled EPA for one year, refusing to admit it had installed a cheat device and insisting that EPA and independent emissions testing was wrong.²²⁴</p>

²¹⁶ John Greenwood, *Has the BP Oil Spill Tared Your Pension Fund?*, TELEGRAPH, July 2, 2010, <http://www.telegraph.co.uk/finance/personalfinance/pensions/7868142/Has-the-BP-oil-spill-tarred-your-pension-fund.html> (last visited Feb. 13, 2016).

²¹⁷ Czuczka & Delfs, *supra* note 131.

²¹⁸ Milne, *supra* note 130.

²¹⁹ Press Release, U.S. Env’tl. Prot. Agency, EPA to Lift Suspension and Debarment of BP from Federal Government Contracts/Agreement Contains Strong Provisions to Continue Safety and Ethics Improvements in Order to Comply (Mar. 13, 2014), <http://yosemite.epa.gov/opa/admpress.nsf/bd4379a92ceceac8525735900400c27/c6a5be4a1a2db87f85257c9a0071760c> (last visited Feb. 13, 2016).

²²⁰ Jan Schwartz & Andreas Cremer, *Volkswagen Chairman: The Emissions Scandal is “an Existence-Threatening Crisis”*, BUS. INSIDER, Oct. 3, 2015, <http://www.businessinsider.com/volkswagens-emissions-scandal-is-an-existence-threatening-crisis-2015-10.html> (last visited Feb. 13, 2016).

²²¹ See Eanna Kelly, *Volkswagen Scandal Sparking a Charge into Electric Cars*, SCL BUS., Nov. 5, 2015, <http://www.sciencebusiness.net/news/77302/Volkswagen-scandal-sparking-a-charge-into-electric-cars.html> (last visited Feb. 13, 2016) (noting that the strategy of Germany thus far has been to keep Volkswagen at arm’s length).

²²² See Justin Gillis, *Scientists Fault Lack of Studies over Gulf Oil Spill*, N.Y. TIMES, May 19, 2010, <http://www.nytimes.com/2010/05/20/science/earth/20noaa.html> (last visited Feb. 13, 2016) (discussing BP’s refusal to allow scientists to send equipment to the ocean floor to measure the rate of oil spillage).

²²³ *Ex-BP Executive Found Not Guilty of Lying to Investigators During 2010 Gulf Oil Spill*, N.Y. TIMES, June 5, 2015, <http://www.nytimes.com/2015/06/06/business/ex-bp-executive-found-not-guilty-of-lying-to-investigators-during-2010-gulf-oil-spill.html> (last visited Feb. 13, 2016).

²²⁴ Vlasic & Kessler, *supra* note 145.