ETHICS AND JUSTICE – WHAT PENALTY SHOULD VOLKSWAGEN BE COMPELLED TO PAY FOR ITS UNETHICAL AND UNLAWFUL CONDUCT, AND ON WHAT BASIS?

by

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I. INTRODUCTION.

Volkswagen (VW) is the third leading automobile manufacturer in the world.1 In September 2015 VW disclosed, under considerable scrutiny, that nearly 11 million diesel VW automobiles were intentionally equipped with a “defeat device” software that allowed them to cheat emission testing. In particular, the software could detect when the car was being tested, and could then lower the nitrogen oxides that were emitted.

Subsequent investigation disclosed VW intended to capture the U.S. diesel automobile market. Their ambitious plan sought to develop a new diesel engine that would be superior to competitors. VW engineers were concerned the only way to pass U.S. EPA emission standards was to use a system normally utilized in only much larger diesel engines. The larger diesel system would have involved an increase in cost, $335 per engine, which VW was unwilling to accept due to the highly competitive U.S. cost market. This led VW to seek an alternative. A software emissions cheat system became the favored option.

Approximately 482,000 VW diesel autos were sold in the U.S. equipped with the cheat software. While recalls are routine when vehicle defects are discovered, purchase owner concerns with loss of vehicle value and environmental pollution require additional consideration.

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When viewing the business ethics practiced by VW, involving such a massive fraud and subterfuge of both the U.S. and European consumer markets, the customary way business says it’s sorry for misconduct is with money.

What should VW’s penalty be for unethical and unlawful conduct? What is the calculation basis for determining an ethical and just retribution? Should it be an economic death sentence, a financial attention getter, prohibition from future market access, or something else? This treatise and its presentation will explore not only the ethics employed by VW, but the depth of its transgressions and what business ethics should demand in exchange for transgression.

VW stockholders played no part in the misconduct, yet they are the ones most affected by financial penalties. Is it ethical that the innocent should pay serious economic penalties for the actions of management? What retribution should managers pay? While the CEO and senior engineers have left VW, clearly many others knowingly, willingly, intelligently, and voluntarily played significant roles in the implementation of this “defeat device” to deceive regulators. While VW was founded by the Nazis in the 1930’s, the “groupthink” exhibited then, is still in practice now. Does this pose a continuing danger? What should the ethical and legal rehabilitative message to VW be?

II. THE FACTS.

A. VW’s Goal.
Like any business, what ceases to grow begins to decay. In 2005 Volkswagen executives expressed their goal of surpassing Toyota as the world’s largest car maker. VW believed its work culture could achieve this ambitious goal. VW management felt its unique style of industrial development could surpass any competitor. In particular, their workplace was described as operating “under a highly centralized hierarchy” where employees are expected to carry out their work, no matter what the requests from management may be. Volkswagen leaders took this practice to the next degree. “They only know one way of management, be aggressive at all times,” said a longtime Volkswagen executive. This type of culture left no room for people to “stand up for their beliefs” or “do what is right.”

At the time, VW had a small market share in the U.S. Trying to surpass Toyota as the largest car company, the company was willing to cut corners in order to save money as the profit margin for their sales in America at the time was only 2%. Volkswagen’s problem was not just the decisions it made in its quest to be the number one automotive manufacturer, it was its culture; a culture that encouraged employees to follow orders, regardless of their ethicality. Volkswagen demanded and received unquestioning obedience from their employees. One critic characterized the automaker’s workplace as “VW had this special culture, it was like North Korea without labor camps.” Temptations to do wrong came from ethical traps such as money,

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5 Id.
competition, rationalization, conformity, following orders, and getting lost in the crowd, and worst of all ‘groupthink.’ All of these factors created irresistible temptations for management, employees, and even subcontractor Robert Bosch.\(^8\)

By 2005, Volkswagen made an ambitious commitment to push into America with a new technology—clean diesel. This new technology once fully developed, would meet the high American regulatory standards regarding nitrogen oxide emissions (NOx). VW was recently successful in pushing into new markets in China and Brazil. With high gas prices and increasing consumer worry about environmental issues, they believed it was the perfect time to push into the USA at any cost.\(^9\)

The goal was set, the company troops were lined up in formation, and the order to march was given. The route of march strategy (how to get there) to accomplish the objective had yet to be determined.

**B. Strategy.**

In 2004 the U.S. imposed stricter emissions standards. This created an engine problem for VW diesel autos because their 2004 engines did not meet these new emission standards.\(^{10}\) The roots of this scandal were planted in 2005 when then-VW brand chief Wolfgang Bernhard wanted the company to develop a new diesel engine for the U.S. market. Bernhard recruited Audi engineer Rudolf Krebs who developed a prototype that performed well in tests in South Africa in 2006. Bernhard and Krebs argued that the only way to make the new engine meet U.S.

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\(^8\) McGrath, *supra* note 3.


emission standards was to employ in the engine system an AdBlue urea solution used on larger
diesel models such as the Passat and Toureg. This would have added a cost of 300 euros ($335
in U.S. dollars) per vehicle, a sum that VW finance officials said was too much at a time when a
companywide cost-cutting exercise was under way. Bernhard left VW in January 2007 before
the diesel engine went into production. Krebs was moved to another role when Martin
Winterkorn became VW Group and brand CEO in 2007. Winterkorn, Audi’s former CEO, asked
Audi development boss Ulrich Hackenberg and Audi engine boss Wolfgang Hatz to move to
VW’s headquarters and continue development work on the diesel engine.\footnote{Staff report,
Bosch warned VW about illegal software use in diesel cars, report says (see p. 2, fn2), Automotive

Mesmerized with its technical capabilities and obsessed with growth to achieve its
number one position in auto manufacturing, then CEO Martin Winterkorn set the lofty goal of a 30% 
reduction of 2006 carbon dioxide (CO2) emissions test results. Since NOx and CO2 are emitted together,
the reduction applied to both. Engineers and other employees were feeling intense pressure to meet this
goal.\footnote{Rachel Middleton, Did former VW boss Martin Winterkorn set too high Co2 emission standards for engineers? (Nov. 9, 2015), http://www.ibtimes.co.uk/former-vw-boss-martin-winterkorn-set-too-high-co2-emission-standards-engineers-1527793.} When a solution could not be found, VW decided to cheat in order to introduce new
diesel vehicles in the U.S. Its deception was so well executed, people believed that VW had
found a way to lessen emissions in its vehicles, so much so that the company would be awarded
“Green Car of the Year” in 2008.\footnote{Staff report, supra note 11.}

To fully comprehend the VW ethical transgression, one needs to understand how an
emissions system is supposed to work. Essentially, modern cars are controlled by a network of
computers that monitor and regulate virtually all moving parts of the vehicle. The performance
of a car can be traced to its software, which instructs all other components of the vehicle exactly
how to carry out functions. Since regulations on greenhouse gas emissions have tightened in recent years, all manufacturers are forced to undergo stringent laboratory tests to reveal each model’s performance and general output of carbon and nitrogen; two gases proven to significantly contribute to the process of climate change.\textsuperscript{14}

The “defeat device” in question was actually sophisticated software that was installed in VW diesel engine vehicles. This software was designed to detect when emissions testing was being performed. The software would modify the vehicle’s performance so that the emissions were drastically reduced during the testing process, but not under actual driving conditions. The software used algorithms to determine when the car was being tested based on variables such as steering patterns, speed, and engine operation.\textsuperscript{15}

The shrewd algorithm of the software was installed into the emissions-control module. In sum, during testing the engine would run cleanly and then switch off emissions control during normal driving conditions which caused the vehicle to emit up to 40 times the allowed level of nitrogen oxides as established by the U.S. Environmental Protection Agency (EPA).\textsuperscript{16}

The software was originally developed by a VW parts contractor Robert Bosch for testing purposes only. It is believed that Volkswagen executives were aware of the “defeat device software” as early as 2007. A letter from electronics manufacturer Bosch to Volkswagen in 2007 warned the company not to use its testing mode for vehicles it intended to sell, noting that the test mode changes were meant for Volkswagen’s internal testing only. This means Volkswagen may have been considering how to leverage the software at least two years before they

\textsuperscript{15} Hotten, \textit{supra} note 10.
\textsuperscript{16} Id.
introduced their diesel vehicles containing the defeat device software in 2009. What other reason would have elicited Bosch’s letter? The fact that their supplier, Bosch, was aware of Volkswagen’s plans and cautioned the company against using the software is evidence that the intent to deceive ethical problem was widespread and not limited to just a few engineers within the company.\textsuperscript{17}

Volkswagen used an Engine Control Unit designed by Robert Bosch that uses a “dyno” mode in addition to a regular mode, to enhance fuel efficiency and performance. The Bosch system used this software to manage engine performance, while Volkswagen used it as their “cheat mode” for emission tests. According to Consumer Reports, Volkswagen lied about the 11 million “clean diesel” cars that have been polluting the air and tried to cover it up by hiding Bosch’s technology.\textsuperscript{18} During this time period (2009-2014), more than 11 million vehicles were sold with this installed software. Utilizing this software, these vehicles were emitting forty times the U.S. mandated restriction emission standard.\textsuperscript{19}

Before external non-European regulators discovered the deception, how was VW’s strategy able to escape German auto emission regulators? Volkswagen was able to get away with falsified documentation because Germany’s Federal Motor Transport Authority (KBA) only relies on statistics provided from the manufacturer’s tests.\textsuperscript{20} In essence, the German government accepts whatever information the domestic manufacturer provides them. In other words, the

\textsuperscript{17} See Bill Chappell, ‘It Was Installed For This Purpose,’ VW’s U.S. CEO Tells Congress About Defeat Device, NPR (Oct. 8, 2015), http://www.npr.org/sections/thetwo-way/2015/10/08/446861855/volkswagen-u-s-ceo-faces-questions-on-capitol-hill.


\textsuperscript{20} Madeline Ratcliffe, James Nickerson, VW share price drops again as emissions scandal widens to include CO2 (Jan 4, 2016), http://www.cityam.com/227987/vw-share-price-falls-out-of-bed-as-emissions-scandal-widens-to-include-co2-data-and-porsche-says-it-is-to-stop-selling-some-models.
wolf is in charge of the hen house. VW’s strategy almost succeeded. According to Car and Driver magazine, “Volkswagen owns 70% of the U.S. passenger-car diesel market.”\textsuperscript{21} When considering all diesel vehicles sales in the U.S., “VW makes up about 39 percent of all diesel vehicles sold.”\textsuperscript{22} So how did the almost perfect subterfuge come to light?

III. DECEPTION, DENIAL, DISHONOR, DISTRUST.

A. The International Council on Clean Transportation (ICCT) and West Virginia University Scientific Expedition.

In November 2012 researchers from the International Council on Clean Transportation (ICCT) sent out a request for proposals to hire consultants to “prove that diesel cars in the American market were cleaner than in Europe principally because U.S. emission standards are stricter.”\textsuperscript{23} For example, the NOx U.S. standard is 31 mg per km versus 80 mg per km in Europe.\textsuperscript{24} In collaboration with West Virginia University which provided researchers and test equipment, the ICCT rented two VW cars and one BMW. The vehicles were also tested in laboratories of the California Air Resources Board (CARB). While the lab tests demonstrated the cars were in compliance with the Clean Air Act, a different result occurred when they were out on the road. The BMW X5’s road test emission results were the same as its lab tests. The VW Passat’s emissions, however, were 5 to 20 times higher than the official lab result while the VW Jetta was 15 to 35 times its lab emission results.\textsuperscript{25} How could this be?


\textsuperscript{23} Andy Sharman, Chris Bryant, Barney Jopson, and Gina Chon, The Big Read, Volkswagen: Fuel for scandal (Sep. 25, 2015), http://www.ft.com/cms/s/0/1af90aac-635e-11e5-9846-de406cc8f2.html#axzz46CscWWF6, [hereinafter Sharman].

\textsuperscript{24} Id.

\textsuperscript{25} Id.
In March 2014 the researchers not only presented their findings at a panel of academics, regulators, and industry delegates, but they published their report online two months later.\textsuperscript{26} Predictably this information made its way to Washington, D.C. and the EPA.

\textbf{B. The EPA Begins to Dance with Volkswagen.}

EPA and VW discussed the emissions questions for over seven months with VW explaining the tests were a mere “technical glitch.”\textsuperscript{27} Volkswagen denied that any defect device had been installed in the affected vehicles for nearly a year since the first findings in the ICCT investigation.\textsuperscript{28} Volkswagen executives told environmental regulators that discrepancies between pollution tests on its diesel cars and the starkly higher levels out on the road were a technical error, not a deliberate attempt to deceive Washington officials.\textsuperscript{29} By December 2014 VW recalled essentially all the diesel engine cars sold in the U.S. to allegedly address the problem. While this involved almost 500,000 cars, it was yet another delay tactic.\textsuperscript{30} As far back as 2006, VW in a PowerPoint presentation prepared by a top VW technology executive knew about and discussed how it could cheat U.S. emissions tests.\textsuperscript{31}

When the recall failed to appreciably change the emissions results, EPA went for the jugular. The EPA threatened to withhold its approval for sale of all 2016 VW diesel vehicles.\textsuperscript{32}

\begin{flushleft}
\textsuperscript{26} Id.
\textsuperscript{28} Id.
\textsuperscript{29} Id.
\textsuperscript{30} Id.
\textsuperscript{32} Id.
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On September 3, 2015 VW confessed it had installed rogue software in the form of a “defeat device” in its Audi and VW diesel engines. The confession was aggravated by the fact VW had been knowingly engaging in deception during the prior year of EPA-VW discussions about the emissions problem. Volkswagen deliberately programmed cars to “turn on pollution controls during tests and turn them off when the cars were on the road” and continued to lie about it when investigators and regulators found out. Hell hath no fury like a regulator scorned.

C. Robert Bosch - Co-conspirator or Innocent Bystander?

Investigation discloses that in 2007 Robert Bosch supplied the diesel software for Volkswagen to test on their diesel automobiles. Bosch warned Volkswagen in a letter of the potential illegal usage of the software as an emissions regulator. In 2011, one of VW’s own engineers warned the corporation of its illegal use of the Bosch software in its diesel engine autos. Nevertheless, with fuel economy being a vital factor in the car purchasing market and VW’s strategic objective of becoming not only the world’s


37 Id.

38 Id.
leading auto manufacturer, but capturing the majority of the U.S. diesel vehicle market, VW elected to knowingly deceive automobile buyers and regulators.\(^\text{39}\)

Despite its warning to VW, German auto parts supplier Robert Bosch has been accused of being a co-conspirator based on Bosch serving as a major auto parts supplier for Volkswagen, and the supplier responsible for producing key components of the diesel engines in several Volkswagen models.\(^\text{40}\) VW had been doing business with Robert Bosch for years. In 2007, VW inquired about buying 11 million licenses of the software from Bosch that could be used to hide the emissions issue in their vehicles.\(^\text{41}\) Bosch sold them to VW.

In 2007, Robert Bosch, while interviewed by the German newspaper Bild am Sonntag, stated that Bosch supplied diesel software to VW for test purposes only, but it ended up in vehicles on the road. Bosch then wrote to VW stating that such use was unlawful.\(^\text{42}\) As stated in the newspaper interview, “Bosch said it had delivered components to VW that are now at the center of a probe into rigged emissions tests. The components included delivery and metering modules for exhaust gas treatment and common-rail injection systems.”\(^\text{43}\) Bosch’s liability is based on its knowledge that VW was using the defeat device software that would produce false emission reports.\(^\text{44}\) Bosch’s production and continued supply of the software, knowing its intended unlawful use, is alleged to have aided and abetted VW’s fraud and subterfuge. One legal commentator notes “Under U.S. law that would make Bosch a co-conspirator under anti-
racketeering laws, making the company liable for triple damages for the fraud caused to U.S. consumers.”

Negating any liability or responsibility in aiding the VW subterfuge, Bosch disclaimed intent to engage in any wrongdoing stating “How these components are calibrated and integrated into complete vehicle systems is fundamentally the responsibility of each auto maker.” Bosch perceived no ethical or legal obligation to notify regulators or consumers of the deceit device contained in VW autos. While Bosch admitted to providing the software for its unlawful purpose, it reminded prosecutors that they were not responsible in how they were used. This sounds familiar when recounting Volkswagen was founded and operated by the Nazis. Is the Bosch disclaimer similar to the producers of Zyklon B that they were not responsible for the Nazis’ use of the gas in concentration death-houses to exterminate undesirables even though the manufacturers knew of its unlawful purpose? Bosch’s complicity is still under investigation.

IV. THE DEVICE IS NOT A “DECEIT” OR “CHEAT DEVICE.”

At the same time Volkswagen was cheating on emissions tests, it was also spending huge sums on advertising for its “clean diesel” technology, allowing the company to capture as much as 70% of the nascent diesel-engine market in the U.S. VW knew it was installing a device to deceive regulators involving NOx emissions. It also knew it was spending enormous marketing costs in furtherance of that deception advertising “clean diesel technology.” In fact, those same

48 Hakim, supra note 44
49 Hakim, supra note 1.
“clean diesel” autos emitted 40 times the U.S. emissions regulatory ceiling. While many at 
Robert Bosch knew this, how many VW engineers, workers, and executives were aware of the 
deception?

By 2015 scrutiny over the vehicles in the U.S. had been increasing. After further testing 
and a demand for answers, VW had to come out of hiding. With no excuses left to use and facing 
an EPA threat to ban the sale of all 2016 VW diesel autos in the U.S., Volkswagen confessed 
that it had been cheating the regulatory system all along.50 Bad news never gets better with age. 
‘Groupthink’ seems to be a problem at Volkswagen that will be addressed later. But for the 
moment, when its’ bad news confession was delivered on Sep. 3, 2015 to the EPA, what was 
VW’s posture when caught in their deception?

A. Denial.

For the year leading up to Sep. 3, 2015, VW and its former CEO Martin Winterkorn had 
been lying to the press and the U.S. government about the levels of NOx emissions levels.51 
While suspicions first surfaced in 2014 when U.S. regulators raised concerns about the emissions 
levels of VW’s clean diesel vehicles during testing, Volkswagen dismissed these concerns citing 
“technical difficulties” and “unrealistic real-world conditions.”52 

In sum, “VW’s alleged crimes appear premeditated and carefully plotted rather than 
resulting from negligence, incompetence or bureaucracy. The company lied to regulators for 
more than a year before admitting the digital deception.”53 What is truly remarkable is VW’s

51 Hotten, supra note 10.
52 Id.
current posture in the wake of such damning conduct. Matthias Mueller, the new VW CEO who succeeded Winterkorn after he was forced to resign in December 2015, subsequently said after the fallout of the emission scandal that VW “didn’t lie” to regulators and dismissed the notion that the company tried to deceive regulators.\(^\text{54}\) This is the exact opposite response you would expect from a new CEO at a company that was just involved in a major scandal with the prior CEO ousted because of it.\(^\text{55}\) VW’s American CEO took a different tack. Their American boss Michael Horn, summed up their leadership dilemma: “We’ve totally screwed up.”\(^\text{56}\) And then he was fired, perhaps for violating VW ‘groupthink.’\(^\text{57}\)

\textbf{B. ‘Groupthink’ in Action.}

Following up on the VW ‘groupthink’ management problem, the British House of Commons Transport Select Committee held hearings to investigate the defeat device and VW’s behavior. Testimony of British VW leaders confirms a systemic mindset of obfuscation, denial, and unethical standard behavior.\(^\text{58}\) Mr. Paul Willis, Managing Director, Volkswagen UK, and Oliver Schmidt, Engineer, Volkswagen UK were called before the committee. Chair: “Are you telling me that you have not removed it [the defeat device]?” Oliver Schmidt: “No. I am telling you that we have removed it, but I said that in the understanding of the Volkswagen Group it is not a defeat device.”\(^\text{59}\)

\begin{itemize}
\item \(^{54}\) Automotive News, Crain Communications, Inc., \textit{VW must do better than this to fix scandal} (Jan. 18, 2016), http://www.autonews.com/article/20160118/OEM/301189980/vw-must-do-better-than-this-to-fix-scandal.
\item \(^{55}\) Id.
\item \(^{56}\) Hotten, \textit{supra} note 10.
\item \(^{57}\) Id.
\item \(^{58}\) British House of Commons Transport Select Committee, \textit{Oral evidence: Volkswagen Group emissions violations}, HC 495, Jan. 25, 2016, Testimony by Paul Willis, Managing Director, Volkswagen UK, and Oliver Schmidt, Engineer, Volkswagen UK, [hereinafter Transport].
\item \(^{59}\) Id. Q.173, at 6.
\end{itemize}
Q205 Graham Stringer: “I am puzzled, Mr. Willis. The first statement you made to the Committee on 12 October was an apology.”

Paul Willis: “Yes.”

Q206 Graham Stringer: “What were you apologising [sic] for?”

Paul Willis: “I was apologising [sic] because what we did was to put a car on a dynamo in a laboratory and the car recognised [sic] it was on the dyno, and as a result it changed the NOx characteristics. That was inappropriate, and the KBA [German regulatory agency] said that was inappropriate. What we needed to make sure was that we worked within the appropriate boundaries of the KBA. That is the simple reason.”

Q207 Graham Stringer: “But you maintain that that recognition of the testing conditions—that the car was under test—was not a defeat device under European law.”

Paul Willis: “That is correct; yes.”

Q208 Graham Stringer: “Can you expand on that? The notes I have before me say that a device that recognises [sic] testing conditions is not compliant with European regulations.”

Paul Willis: “European regulations say that it has to be part of the emission control system. European regulations also say that it has to be under conditions that may reasonably be expected to be encountered in normal vehicle operation. Our position is that that is absolutely not the case.”

The attitude displayed by even the British VW executives conflicts with commonly accepted norms of business behavior. Such conduct tends to aggravate the situation they now

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60 Id. Q.205.
61 Id. Q. 206.
62 Id. Q. 207, 11-12.
63 Id.
64 Id. Q. 207 & 208, 11-12.
find themselves in. How it helps their case is elusive. Yet these British VW executives continued with a ‘groupthink’ defense.

MP Graham Stringer: “You are saying that even though your device recognised [sic] that the car was being tested, according to your legal advice, it is still compliant with European regulations. Paul Willis: That is our position, yes.”

MP Stewart Malcolm McDonald: “How would it be possible for a reputable company such as Volkswagen to be engulfed in a scandal this big and for it only to be the work of a handful of engineers? Do you honestly think that the public at large—I do not just mean Volkswagen consumers—buy that, Mr. Willis? I will be honest with you; I don’t, and I don’t think this Committee does.”

Paul Willis: “I will give you my opinion. My opinion is that I think it was very few people. We will have to wait until the Jones Day report comes out. Like you, I am bemused about how something like this could happen. I am really bemused.”

MP Stewart Malcolm McDonald: “Do you think that Volkswagen is an ethical company?”

Paul Willis: “Yes, I do.”

MP Stewart Malcolm McDonald: “Do you think it knows the difference between right and wrong?”

Paul Willis: “Yes, I most certainly do.”

MP Stewart Malcolm McDonald: “To follow up on Mr. Stringer’s points, you seemed to dance on the head of legal jargon as to whether or not it was a defeat device and whether it does or does not break European law. Don’t you think that what people see is that the Volkswagen Group, essentially, is “at it,” as we say in Scotland? You have perversed environmental regulations. You

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65 Id. Q.209, at 12.
have treated European customers with disdain. You have treated regulators like bureaucrats and people are quite fed up, and not just with the actions of Volkswagen… You talk about your company being ethical and knowing right from wrong, but isn’t your entire industry dogged by this kind of problem, where you have tried to get around regulations all over the world?

Paul Willis: No, I absolutely refute what you are saying.”

Incredulously the Committee MP asks: “Do you really?”

Paul Willis: “Yes, I absolutely do. Volkswagen is an upstanding company. It cares about its customers. It invests billions, more money than any other car company, in technology. It is important that we get to the bottom of this. By the way, I do not agree with what you say—that we treat people and customers with disdain. I am very clear that none of this affected customers in any way. Mr. Schmidt says, and I believe him and I believe the KBA [German regulatory agency], that there will be no impact on fuel consumption, but I would like to understand completely what has gone on.”

The Committee chair takes up the inquiry. Chair: “Don’t you think that somebody might think you were perhaps trying to deceive different regulatory authorities by acting differently in different places? Both of them were found to be wrong.”

Oliver Schmidt: “I do not understand the question.”

Chair: “Could that be interpreted as an attempt to deceive the different regulatory authorities, the European ones and the American ones, by making different adjustments in different places, and both have been found to be wrong, if not illegal?”

Oliver Schmidt: “I don’t know what to say.”

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66 Id. Q. 220, 221, 222, 223, at 14.
67 Id. Q. 224, at 14.
68 Id. Q. 252, 253.253.
VW executives do not understand the ethical questions, and when the recognition light finally does come on, they do not know what to say. Given the breadth and depth of the problem, it is remarkable to note how few have been held accountable for this unethical behavior, which may be part of the problem as well. Safety does lie in numbers. Only nine managers have been suspended, and around fifty employees have admitted to being aware of the emissions cheating, but have not been reprimanded.\footnote{Hotten, supra note 10.} Despite this leadership catastrophe, the departing German CEO Martin Winterkorn was paid 7.3 million Euros in 2015, including 5.9 million in performance bonuses. His successor Mathias Muller is not as fortunate having some of his performance bonuses deferred until 2019, and due only if the company’s shares see a rebound.\footnote{William Boston, VW Looks to Move Beyond Scandal, Wall St. J., at B3 (Apr. 29, 2016), https://www.morningstar.com/news/dow-jones/durables/TDJNDN_201604292143/vw-looks-to-move-beyond-scandal-wsj.html.}

V. THE CARNAGE – CAUSE AND EFFECT.

When the smoke clears from the fires of unethical and unlawful conduct, the burned parties are invariably the shareholders. How serious are the economic burns? It is understandable the U.S. Department of Justice (DOJ) and the EPA feel deceived and lied to by VW since the emissions inquiry began. Decisions, in this case strategic decisions to intentionally obfuscate and deceive, have consequences. DOJ, on behalf of EPA, has filed civil suits against Volkswagen that could subject the company up to 45 billion dollars in fines.\footnote{Emissions Scandal, supra note 44.} Both agencies are also conducting criminal investigations, as are all 50 states and numerous other countries such as Germany, France, Italy, Sweden and South Korea.\footnote{Id.} In addition, more than 500 class action
lawsuits have been filed against the company by owners, lessors, used car dealers, competitors and shareholders.\textsuperscript{73} What might have initially looked like a second degree economic burn, has germinated into a first degree catastrophe.

Penalties for violating the Clean Air Act alone could total more than $18 billion. While VW has reluctantly admitted that its deceit device was installed in approximately 500,000 diesel vehicles sold in the U.S., this device has also found its way into more than 11 million cars worldwide.\textsuperscript{74} In particular, evidence shows that these devices can be found in VW’s Polo, Golf and Passat, and the Audi A1 and A3.\textsuperscript{75}

\textbf{A. Emissions Impact.}

Besides the economic damage to shareholder equity, the purpose of environmental standards and regulation is related to public health. Long-term exposure to the pollution of nitrogen oxide is known to cause inflammation of the airways and more serious respiratory conditions along with heart complications.\textsuperscript{76} The EPA says “US Volkswagen vehicles emitted between 10,392 and 41,571 tons of NOx [nitrogen oxide] each year if they were all being judged against the 2016 model emissions standards.”\textsuperscript{77} When considering the total 11 million autos produced, VW’s defective diesel cars could be responsible for between 227,161 and 948,691
tons of NOx emissions.\textsuperscript{78} In London, more than 9,500 premature deaths in 2015 have been linked to the exposure of nitrogen oxide, so this obviously matters.\textsuperscript{79}

B. \textit{The Danger Posed by NOx.}

Nitrogen Oxides are, in fact, a family of highly poisonous gasses. Many objects such as cars, trucks, boats, and power plants release NOx into the air when burning fuels at high temperatures. We recognize it in the U.S. It is often orange-brown in color and when it reacts with air. It creates what we know as smog, like we experience in highly populated areas such as Atlanta and Los Angeles.\textsuperscript{80} Side effects of living in an area with heavy pollution can include asthma attacks, inflammation of the lungs, and even lung cancer, affecting children and elderly people the most.\textsuperscript{81} For these reasons, regulatory limits are enacted to protect public health.

NOx is different from carbon. It may be worth noting that regardless of a fixation on “carbon footprints” as the main contributor to environmental destruction, many scientists agree that excess levels of nitrogen actually play a more diverse role in negative environmental impact when compared to carbon. In essence, these Volkswagen vehicles were proven to be fraudulent in the most destructive ways possible in terms of environmental damage.\textsuperscript{82}

\textsuperscript{78} Id.
\textsuperscript{79} Id.
\textsuperscript{81} Id.
C. Shareholder Loss.

Under U.S. law, VW can face as much as $37,500 for each vehicle that was found to be in violation of EPA standards, which can add up to roughly $18 billion in fines.\(^83\) There is also the impact on shareholder stock price. After VW’s share price dropped nearly 23 percent, VW management was compelled by investors to hire the American law firm of Jones Day that specializes in white collar crime to investigate the entire matter.\(^84\) The drop in stock price alone eviscerated roughly $17.6 billion in shareholder value.\(^85\)

But there is more to come. The Federal Trade Commission has initiated an investigation into whether VW’s advertising for “clean diesel” constitutes fraud in advertising.\(^86\) VW is now expected to offer U.S. individual owners $5,000 each in compensation.\(^87\) VW intends to offer U.S. owners the option to sell their car back to VW, or have it modified to meet EPA standards.\(^88\) Those that have leases can simply return the car with no financial obligations.\(^89\) To buy back all the U.S. 482,000 VW diesels, fully equipped with their deceit devices, Kelly Blue Book analysts estimate the cost to VW will be $7.3 billion.\(^90\)

U.S. District Court judge Charles R. Breyer in San Francisco was appointed to consolidate the 500 civil suits. He informed VW lawyers in March they had until April 21 “to announce a concrete proposal for getting the polluting vehicles off the road.”\(^91\) European regulators have finally entered the fray as well. On April 22, 2016 German authorities notified

\(^84\) Id.
\(^85\) Id.
\(^87\) Nathan Bomey, Volkswagen set to pay U.S. diesel owners $5,000, Argus Leader, at 4B (Apr. 21, 2016).
\(^89\) Id.
\(^90\) Id.
\(^91\) Id.
Daimler AG, Volkswagen, and General Motors Co. to recall 630,000 diesel-powered cars sold in Germany to repair defective emissions controls. On top of the U.S. recall, what will this new expense cost VW? Faced with mounting regulatory and 500 civil actions that only see the sky as the liability limit, is VW a good investment prospect?

D. Brand Negativity.

As a consequence of the increasing brand negativity, VW has experienced a 2% loss in sales. Volkswagen had a 10.8 billion-euro ($12.2 billion) profit in 2014, but registered a 1.6 billion-euro ($1.8 billion) loss in 2015. It set aside in 2015 $18.2 billion as a one-time charge to deal with the total deceit device aftermath, after it had already set aside $7 billion to cover such costs. Clearly this is another financial error in judgment as the deceit device saga appears to be a gift that keeps on giving.

Thirty percent of Volkswagen’s market value has been erased since the scandal broke. Furthermore, Volkswagen has withdrawn its application to have their diesel vehicles approved by the EPA for sale in the USA for 2016. Moody’s downgraded Volkswagen’s credit rating because the potential cost of the scandal is estimated to be into the tens of billions of euros. Volkswagen is expected to survive the financial onslaught of litigation and sanctions coming at them, but what about their reputation and future success?

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93 Nathan Bomey, Cost of Volkswagen Scandal Grows to $18.2B, USA Today – Argus Leader, at 4B (Apr. 23, 2016), [hereinafter Cost].
94 Id.
95 Id.
96 Id.
98 Id.
Reuters reports "The emissions issue is likely to have a number of adverse effects on Volkswagen's future earnings and cash flows, which may only become visible over time."  

Matthias Hellstern, managing director of Moody's corporate finance team in Frankfurt, told Reuters “…Earlier this month [CEO] Winterkorn's successor, Matthias Mueller, warned workers gathered in Wolfsburg that the scandal would inflict "substantial and painful" financial damage. Gauging the full extent of this would take years, he added.”  

Faced with a sea of litigation and regulatory attention, Volkswagen has abandoned its goal to become the world’s largest automaker by 2018. VW Chief Executive Mathias Muller told a meeting of VW’s supervisory board in Wolfsburg, Germany, on Apr. 22, 2016, “There is no question that the diesel issue is a heavy burden on the company’s results.”  

How heavy is that burden? Mathias reported there could be further expenses that would be generated from settlement discussions with the U.S. Department of Justice and the “blend of car buybacks, repairs and compensation, and to pay an environmental fund for the cars’ excess nitrogen-oxide emissions.” This does not include U.S. criminal penalties or lawsuits that are coming in Europe. 

VI. THE RULES MATTER, OR DO THEY? 

Law regulates behavior. It is the moral minimum for conduct. It provides the floor beneath which no one may fall. If one does, then society imposes sanctions. These apply to business just like ordinary citizens. While Europe has different standards in vehicle emissions as

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100 *Id.*

101 Smog-Test, *supra* note 92.

102 *Id.*
previously discussed, legal standards matter as much in the U.S. as they do in Europe. What rules did VW intentionally violate? States, like California, may impose stricter emissions standards than the federal government as long as there is no conflict involving federal preemption. Vehicle emissions are one of those public health responsibilities that both the state and federal government share. As such, VW transgressed both U.S. state and federal law. As the French philosopher Voltaire observed, “If you want to converse with me, first define your terms.”103 What legal terms applied to VW that she violated?

A. The Clean Air Act (CAA).

In 1970, Congress passed the CAA to regulate air emissions from stationary and mobile sources to protect human health along with the environment. Under the authority granted by the CAA (42 USC 1857 et seq.), the EPA can set “mobile source limits, ambient air quality standards, hazardous air pollutant emission standards, standards for new pollution sources, and significant deterioration requirements. In the exercise of this authority, the EPA implements the CAA through regulations codified in the Code of Federal Regulations (CFR) which have the force of law.104 The EPA’s regulatory framework for vehicles begins with its certification program. The EPA administers a certification program including issuing certificates of conformity (COCs) to ensure that all manufactured vehicles, including light-duty vehicles, satisfy current U.S. standards for air pollution.105

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104 George A. Steiner, and John F. Steiner, BUSINESS, GOVERNMENT, GOVERNMENT, AND SOCIETY, 13th ed., at 343 (2016).
105 42 U.S.C. §. 7522 (a)(1).
VW’s first legal and ethical transgression violates a statutory prohibition involving the sale of any new motor vehicle not covered by valid certificates of conformity.\textsuperscript{106} It is unlawful to sell a new vehicle in the U.S. without a COC. The COC represents that the vehicle conforms to U.S. legal requirements, i.e., EPA regulatory standards. Volkswagen violated the CAA by submitting false COC applications to mislead the EPA to believe that vehicles applying for COCs met applicable federal emission standards, and thereby to obtain the EPA-issued Certificate of Conformity.

The second VW violation involves the CAA statutory prohibition that “No new light-duty vehicle … shall be equipped with a defeat device.”\textsuperscript{107} Furthermore, the implementing CFR prohibits the use of a defeat device in any new light-duty vehicle (passenger car).\textsuperscript{108} The use of a defeat device in this class of vehicles constitutes a violation of Section 203 (a)(3)(b) of the Clean Air Act (CAA).\textsuperscript{109} While British VW executives may quibble over what does and does not constitute an emissions control device, the implementing CFR defines a defeat device as an auxiliary emission control device (AECD) that “reduces the effectiveness of the emission control system under conditions which may reasonably be expected to be encountered in normal vehicle operation and use. Motor vehicles equipped with defeat devices cannot be certified.”\textsuperscript{110} The CAA contains an express prohibition against the sale of cars containing such devices.\textsuperscript{111}

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\textsuperscript{106}CAA, Sec. 203 (a)(1).
\textsuperscript{108}40 C.F.R. § 86.1809-12
\textsuperscript{110}40 C.F.R. § 86.1803-01.
\textsuperscript{111}The manufacture, sale or installation of a defeat device in the class vehicles constitutes a violation of Section 203 (a)(3)(b) of the Clean Air Act (CAA), 42 U.S.C. Sec. 7522(a)(3)(b), which states that “any person to manufacture or sell, or offer to sell, or install, any part or component intended for use with, or as part of, any motor vehicle or motor vehicle engine, where a principal effect of the part or component is to bypass, defeat, or render inoperative any device or element of design installed on or in a motor vehicle or motor vehicle engine in compliance with regulations under this subchapter, and where the person knows or should know that such part or component is being offered for sale or installed for such use or put to such use.”
\end{flushright}
A third VW violation involved failure to submit with the COC application a list of all AECDs installed on the vehicles. Had it listed its defeat device, regulators might have caught on sooner that the emissions game was afoot.\textsuperscript{112}

Aside from the intentional legal violations, extremely serious ethical issues are involved which will be addressed shortly.\textsuperscript{113} Yet for years VW knowingly, willingly, intelligently chose to deceive the public and their consumers.

\subsection*{B. Why Did Volkswagen Do It?}

After reading this far, the question that we need to ask is ‘why did VW decide to cheat?’ The all too simple answer is opportunity. The U.S. emission standards that were implemented in 2004 were so tough that most of VW’s competition walked away from the diesel market.\textsuperscript{114} They chose not to compete, nor to cheat. There is another more compelling reason, in fact three reasons, why VW willingly decided to violate ethical business norms and cheat. John C. Maxwell is his insightful business “\textit{Ethics 101}” treatise observes “when people make unethical choices, they do so for one of three reasons: 1. We do what’s most convenient. 2. We do what we must to win. 3. We rationalize our choices with relativism.”\textsuperscript{115}

If VW could engineer a cost efficient diesel product on the road, they would essentially own the U.S. market. VW Chairman Hans-Dieter Pötsch captured it best when he stated that “engineers decided to cheat because they couldn’t find a technical solution within the company’s

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\textsuperscript{112} According to 40 C.F.R. § 86.1843-01, a manufacturer who wants to sell light-duty vehicles in the U.S. must submit a COC application to the EPA, which include a list of all AECSs installed on the vehicles. The sale of any new motor vehicle that are not covered by valid certificates of conformity constitutes a violation of Section 203 (a)(1) of the CAA, 42 U.S.C. § 7522(a)(1).
\textsuperscript{113} Vlasic, \textit{supra} note 27.
\textsuperscript{114} McGrath, \textit{supra} note 3.
\textsuperscript{115} John C. Maxwell, \textit{ETHICS 101}, 3-5 (2003), [hereinafter Ethics 101].
timeframe and budget to build diesel engines that could meet US standards.”116 VW, and more than just its engineers, selected Maxwell’s #1 reason because, faced with the pressure of an unmatchable timeline and managerial refusal to incur $335 in increased vehicle costs to upgrade its diesel engine to meet EPA standards, they seized the Bosch testing device staring at them in the face and installed it. Even when these same engineers did find a solution, they decided to keep cheating because it was easier.117 “It was convenient.”

What about Mr. Maxwell’s #2 response? “We do what we must to win.” What was the pressure like at Volkswagen to be the number one auto manufacturer in the world? Ambitious, demanding leadership led to the pressure necessary to commit unethical behavior at Volkswagen. Emission standards for Nitrogen Oxide from diesel engines in Europe are much less restrictive than America. Volkswagen wanted to be the number one automaker in the world. To accomplish that goal it needed to break into the American market where it had only 2% market share. The plan was to create and perfect a new technology called “Clean Diesel.” The problem was they could not get the technology to work well enough to get into the acceptable range of the EPA emission standards. With a culture of ambition, demanding deadlines and fear of being ruthlessly fired, no one at Volkswagen “had the courage to admit defeat.”118

This was when the defeat devices were deployed. Instead of delaying the push into the United States until the technology could work, the engineers at Volkswagen believed it was better to cheat to meet the deadlines in fear of ruthless retribution from corporate leaders. Therefore, it was the corporate culture of pressure, fear and demand that allowed the unethical behavior to be rationalized. What is even more curious, is that this is not the first scandal

116 McGrath, supra note 3
117 Id.
118 Hoaxwagen, supra note 9.
Volkswagen has been involved in. They have participated in corporate espionage and criminal abuse of office scandals in the ten years before 2005.\textsuperscript{119} This demonstrates the toxic culture at the top of the Volkswagen corporate ladder which affected lower levels of auto production.

A third reason given by Maxwell for unethical decision-making is that “we rationalize our choices with relativism.” The VW engineers justified that it is was right to cheat because there was no other way to get to a solution given the constraints. They kept rationalizing this was the right solution even when presented with another solution.\textsuperscript{120} Others believe that the problem that Volkswagen has is that they are trying to cut corners. When you try to cut corners in the business world, at some point it is going to return to impact you no matter how long you try to hide it. Putting this type of pressure on obedience stifles employees’ willingness to stand up for rectitude. In an atmosphere where an employee is worried about losing their job if they do not do what they are told, that employee is more likely than not to do unethical things when asked.\textsuperscript{121}

\section{VII. DR. FRIEDMAN AND VOLKSWAGEN ETHICS.}

Dr. Milton Friedman, Nobel prize-winning economist observes “The manager is the agent of the individuals who own the corporation or establish the eleemosynary institution, and his primary responsibility is to them.”\textsuperscript{122} Volkswagen’s use of Friedman’s theory of ethics bred a culture of pressure and competition, argue Jack Ewing and Graham Bowley.\textsuperscript{123}

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\textsuperscript{119} Id. \\
\textsuperscript{120} McGrath, \textit{supra} note 3 \\
\textsuperscript{121} Aggressive Ambition, \textit{supra} note 4. \\
\textsuperscript{122} Milton Friedman, \textit{The Social Responsibility of Business is to Increase its Profits}, N.Y. Times Magazine (Sep. 13, 1970), http://www.colorado.edu/studentgroups/libertarians/issues/friedman-soc-resp-business.html. \\
\textsuperscript{123} Aggressive Ambition, \textit{supra} note 4.
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at VW around the time when fuel economy became a vital factor in the vehicle purchasing process.\textsuperscript{124}

As discussed earlier, Volkswagen’s problem was that they could not find a solution that met emissions standards without using a device that cheated. Once they did find a solution, they chose not to implement it. They thought that they could get away with continuing to use the cheating devices to get their vehicles through emissions testing. ‘Groupthink’ believed that by passing regulation testing and by meeting their budget and deadline, they were doing what was best for everyone, when in the long run it would end up being detrimental to not only the company, but also the public and the environment.\textsuperscript{125} Volkswagen’s corporate culture has been described as “confident, cutthroat, and insular.”\textsuperscript{126}

This culture has continued throughout the 78 years Volkswagen has been in operation. This type of culture reaches far beyond corporate management. Engineers and employees throughout the organization are aware of the expectations management has for employees of Volkswagen. This type of culture can only continue for so long before ethics no longer play a vital role in decision-making. It has been said that this culture contributed to the recent law-breaking events. Given similar stories in its history, this accusation does not seem hard to believe.\textsuperscript{127}

Since EU governments rely on manufacturer emissions reports as their primary source of information, there is a degree of trust that must be sustained in order for environmental regulations to be effective. A British cabinet secretary described the damage done by Volkswagen’s ethical breach. Testifying before the House of Commons Transport Select

\textsuperscript{125} McGrath, \textit{supra} note 3.
\textsuperscript{126} \textit{Aggressive Ambition, supra} note 4
\textsuperscript{127} \textit{Id.}
Committee, Patrick McLoughlin, Secretary of State for the Department for Transport, offered the following:

Chair: “Could you tell us when you first knew about Volkswagen’s deception?”

Mr. McLoughlin: “I became aware over the weekend of the 18\textsuperscript{th} [of Sep. 2015], when various statements were coming out from America about what Volkswagen said about the issues relating to Volkswagen. Let me just say that I think they have behaved in an appalling way. These devices were made illegal in 1998. It is fairly unbelievable to think that a company of the size and reputation of VW have been doing something like this and finding ways around regulations. I think they are going to suffer very substantial damage as a result, and they deserve to, quite honestly. It raises questions that we then have to ask about the overall testing of emissions, which obviously flow from that, and that is exactly what we are going to be doing.”\textsuperscript{128}

This brings the discussion back to the ethical theory of Utilitarianism that defines morality as the maximization of net utility for all parties affected by a decision or action.

“Actions are right to the degree that they tend to promote the greatest good for the greatest number.”\textsuperscript{129} Volkswagen’s decision to cheat the emissions test does not promote the greatest good for the greatest number. While installing the cheating software benefits Volkswagen’s employees and shareholders, it negatively affects customers and practically every living organism on Earth. Trying to shift the blame to Dr. Friedman and Utilitarian ethics will not save Volkswagen from its own unethical decision-making.

While the Jones Day investigation is attempting to determine who knew what and when, internal and external investigators should be examining the corporate culture that led to the

\textsuperscript{128} Transport, supra note 58, 16-17.
\textsuperscript{129} Charles D. Kay, Notes on Utilitarianism, Wofford College Department of Philosophy (1997), http://sites.wofford.edu/kaycd/utilitarianism/.
scandal at VW. High expectations and unrewarding demands caused failures at the lower levels of the corporation. A survey by the National Business Ethics Study found the most common cause for an employee to compromise his or her ethics came from management. The survey also showed that 70% percent of the employees mentioned unrealistic performance demands as the common cause to break ethical standards. 130

The 78 year-old company’s unusual culture described as —confident, cutthroat, and insular—has come under scrutiny as potentially enabling Volkswagen’s lawbreaking behavior. For decades the company, which was founded by the Nazis with the help of Ferdinand Porsche, the inventor of the Beetle, has been controlled by a tight-knit troika of a billionaire family (Mr. Porsche’s descendants), a German state government (Lower Saxony), and powerful labor unions.131 With all this as prelude, the question naturally arises “what to do?”

VIII. THE WAGES OF SIN – WHAT PENALTIES ARE IN PLAY?

While there is a cacophony of international cries calling for retribution, there is yet to be a consensus identified as to what punishment fits Volkswagen’s ethical and legal offense. How does business normally say “it’s sorry?” It writes a check.

A. Examples.

The business world was stunned when pharmaceutical giant Johnson & Johnson found itself in an ethical crisis after 7 people died from Tylenol capsules that had been mixed with the

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deadly poison potassium cyanide. Immediately after this happened, Johnson & Johnson voluntarily pulled all of its Tylenol off their shelves which amounted to $100 million worth of product. This happened without government insistence or legal requirement. Then Johnson & Johnson proceeded to develop new tamper resistant packaging on its Tylenol and resold it under the same brand name. If Johnson & Johnson had not gone through all this trouble to make it right, Tylenol might have failed. Instead Tylenol thrived after it was put back on the shelf because the public recognized that Johnson & Johnson immediately admitted that they were responsible for their product and its safe use. It aggressively addressed the problem so that it could never happen again.132

The most comparable example of an automaker that went through a similar situation as VW was Toyota in 2010. Toyota’s problems were safety defects, the worst of which was an issue where the car’s accelerator would jam. These defects led to multiple deaths. Toyota did not initially know what the defects were and acted slowly to correct the situation which hurt the company even more. However, Toyota was able to rebound by focusing on its brand and Toyota’s historical image of good performance. It focused its new messaging to the public on its track record of safety and excellence. Toyota also proved to the public that the handling of this event was an aberration.133 Toyota recalled over 10 million cars.134

In 2014 South Korean car makers Hyundai Motor Co. Ltd. and Kia Motors Corp. had a similar dance with the EPA. They ultimately settled to resolve alleged violations of the Clean Air Act. The car makers paid a $100 million civil penalty. Like VW, the penalties focused on

133 Id.
allegations Hyundai and Kia vehicles emitted more pollutants than what the companies had certified with the EPA. They also overstated the vehicles’ fuel-economy performances.\textsuperscript{135}

\textbf{B. Judgment.}

While there is widespread agreement Volkswagen should be punished, there has been little discussion as to what that punishment should ultimately be. What are the options?

Option #1: VW Has Suffered Enough.

Volkswagen clearly has a responsibility to repay U.S. consumers for their ill-informed purchase and use of the company’s vehicles. At this time, Volkswagen is offering a full recall and replacement of vehicles to customers, as well as upgrades and cash incentives for customers that remain VW drivers.\textsuperscript{136} When legal and other expenses are factored in, VW has set aside $18 billion to cover these anticipated costs.\textsuperscript{137} This has the potential to be the largest corporate economic apology in decades. Further retribution would greatly exceed historic precedent and give way to claims of mendacity, not public interest.

Option #2: The Purpose of Statutory Penalties is to Punish.

Under the Clean Air Act, a company must follow the Tier II Light-Duty Vehicle Emissions Standards. In addition, vehicles must not contain devices that alter their emissions tests. Section 205 of the Clean Air Act provides that “the Administrator shall take into account the gravity of the violation, the economic benefit or savings (if any) resulting from the violation,

\textsuperscript{137} Cost, \textit{supra} note 93.
the size of the violator’s business, the violator’s history of compliance with this title, action taken to remedy the violation, the effect of the penalty on the violator’s ability to continue in business” when determining the amount of the civil penalty.138 Each of these factors deserves consideration.

1. **Gravity of the violation.**

   The punishment sought by the United States government is fair and just when its gravity factors are taken into consideration. (a) Volkswagen employees knowingly deceived regulators not only with the introduction of the deceit devices into autos sold in the U.S. starting in 2009 and continuing until discovered in 2015, but during the EPA and CARB investigations. (b) Such fraud and unethical behavior should be punished. (c) Public trust has been egregiously violated. The DOJ Assistant Attorney General for the Environment and Natural Resources Division, John C. Cruden, argues “Car manufacturers that fail to properly certify their cars and that defeat emission control systems breach the public trust, endanger public health and disadvantage competitors.”139 VW should pay for this breach of public trust. In exchange for the right to do business in the U.S., foreign enterprises are expected to do so lawfully and ethically. When they knowingly, willingly, intentionally, voluntarily not only seek to cheat in the marketplace, but

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then attempt to obfuscate, lie, and deceive regulators for almost a year, the gravity of this business conduct constitutes an aggravating factor.

On the other side of the Atlantic, British VW executives continue to deny the company deceived anyone. What does this say about VW’s ongoing corporate ethical culture at its highest executive levels?

HC Member Mark Menzies: “No, excuse me, why did you come to the Committee before Christmas apologizing, with all the mea culpas at the opening about how sorry Volkswagen was, and now you are telling us—you are really telling us—that at no point were these defeat devices, which were fitted to cars without customers’ knowledge or any forward marketing, an attempt to deceive? If you are saying that, the words you said earlier about seeking to be honest and transparent are hollow words.”

Paul Willis: “Thank you. I would like to repeat what I said. I do apologise [sic] for what our company has done. We want to fix the cars so that they are in line with regulations. I refute your allegation that we misrepresented the vehicles in any way. To have compensation, Mr. Menzies, you need a loss, and there is no evidence of a loss. However, the most important thing is that we fix the cars with no inconvenience to the customers. There is no difference in the fuel consumption today or tomorrow, so there is no loss.”

What does this continued denial reveal about VW’s ethical corporate culture?

VW is a large company. As such, it profited off of their unlawful and unethical conduct in the sale of almost 500,000 diesel vehicles in the U.S. and 11 million world-wide. The penalty should reflect the size of the company and profit to curb future behavior and send a clarion call

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140 Transport, supra, note 58, at 25 (Oct. 12, 2015).
such conduct is reprehensible, especially when performed by a large company and industry leader.  

In its civil complaint against VW and Porsche filed in the U.S. District Court for the Eastern District of Michigan on January 1, 2016, DOJ in its first claim for relief seeks injunctive relief against further sales of diesel vehicles not in conformity with CAA requirements. More importantly DOJ seeks civil penalties for the sale in the U.S. of approximately 500,000 deceit device vehicles.  It alleges that each vehicle sold is a separate offense under sec. 203(a)(1) of the CAA. Specifically, it asks for a penalty of $32,500 for each vehicle sold before Jan. 13, 2009, and $37,500 for each vehicle sold in the U.S. after that date. Since most of the vehicles were sold after Jan. 9, 2009, the total bill comes in around $18,750,000. This sum does not include compensation to consumers who purchased these vehicles.

2. **The economic benefit or savings (if any) resulting from the violation.**

While there is more efficient fuel consumption in diesel vehicles that do not contain emissions control devices, given the public health danger posed by NOx emissions, it is hard to argue the ethical value of fuel economy over the health of children or the elderly.  

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143 Id. at para. 107, at 31.

144 Id. CAA, sec. 204(a) and 205(a), 42 U.S.C. §§ 7523(a) and 7524 (a).


146 Rupert Neate, *Volkswagen under investigation over illegal software that masks emissions*, The Guardian (Sep. 18, 2015). VW cheated emissions test in order to market their vehicles as eco-friendly, which truthfully they were not due to the facet they transmitted more Nitrogen Oxide. Nitrogen Oxides levels were 40 times higher than permitted by US standards. Volkswagen cheated on its emission testing to manufacture a cost efficient and high performing vehicle, http://www.theguardian.com/business/2015/sep/18/epa-california-investigate-volkswagen-clean-air-violations.
city itself, the Los Angeles Times reported the affected VW diesel cars emit around 10 to 40 times of NOx allowed per mile.\textsuperscript{147}

The Clean Air Act was put in place to reduce pollution from refueling emissions, vehicle exhaust, and evaporating gasoline. It has also saved the United States 22 trillion dollars in health-care costs in the last 20 years by reducing several serious health issues such as congestive heart failure, COPD, bronchitis, and premature death.\textsuperscript{148} Reasonable minds should agree this matters. VW’s brazen unconcern for public health speaks volumes about the corporate culture.

3. \textit{The size of the violator’s business.}

Volkswagen is valued at $126 billion as of May 2015.\textsuperscript{149} As one of the world’s largest auto manufacturers, VW is positioned to sustain a major economic apology or \textit{mea culpa} to demonstrate the depth and integrity of its regret for its multiple ethical and legal transgressions.

4. \textit{The violator’s history of compliance with this title and action taken to remedy the violation.}

VW has been accused of CAA violations before. They have a history of pushing the environmental envelope, but they continue the behavior. When caught, they get out their checkbook and choose to settle.\textsuperscript{150}

5. *Action taken to remedy the violation.* While VW is still in settlement negotiations with dealers and lessors, over 500 class action suits await negotiations after VW admitted in September 2015 to having installed cheat device software in 482,000 diesel vehicles sold in the U.S. The vehicles have not had the cheat software removed, nor has damage to the public health been remedied.

6. *The effect of the penalty on the violator’s ability to continue in business when determining the amount of the civil penalty.* Considering the $126 billion market cap of VW, they can readily pay the EPA civil penalties and more.

When evaluating these CAA section 205 factors that the EPA Administrator must consider, it is the gravity of the violation as an aggravating factor that stands out, together with the totality of other factors. This commands a unique civil penalty for an extraordinarily bold and shameless rapacious series of unethical business practices. Unique punishment is appropriate precisely because VW is one of the world’s largest automobile manufacturers. A message needs to be sent to VW and others tempted to similar unethical behavior that at least America, will not only protect its people from such business predators, but sanction those who dare to exploit their market ambition to the detriment of public health and safety.

But what about the U.S. consumers who were duped by VW’s eco-green marketing fraud?151 The DOJ EPA complaint did not seek compensation for purchasers of the diesel defeat device vehicles. VW has separately reached a preliminary agreement to offer U.S. buyers of such diesel vehicles a combination of car buybacks, lease releases, repairs, and compensation.152

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152 Smog-test, *supra* note 92.
The cash compensation alone to individual owners is expected to be $5,000.\textsuperscript{153} All of this, to include the 500 civil suits consolidated in federal court in San Francisco, will far exceed the $18 billion VW faces in DOJ requested civil penalties. Based on precedent, it is the considered legal opinion among experts of the trade that Volkswagen will be found guilty of deceiving consumers of the vehicles in question and that class action lawsuits will be settled for considerable dollar amounts, most likely in the billions.\textsuperscript{154}

“Volkswagen cheated its way to the top of the automotive food chain and spared no victim along the way.” This quote comes from documents filed in February 2016 in the U.S. District Court in California as part of proposed class-action suits against VW.\textsuperscript{155} Clearly the class action civil suits seek far more than $5000 each for VW’s deceived U.S. customers. As a consequence of the flood of litigation, until further notice, Volkswagen has suspended the sales of the deceit device equipped models. It has undergone the recall process to correct the software so that the vehicles will perform to federal standards at all times.\textsuperscript{156}

Option #3: Market Death.

Recalling that it took a threat from EPA that it would not approve any Certificates of Conformity for 2016 VW diesel vehicles to bring forth VW’s Sep. 3, 2015 confession to the EPA

\textsuperscript{153} Nathan Boney, \textit{Volkswagen set to pay U.S. diesel owners $5,000}, Argus Leader, at 4B (Apr. 21, 2016).


\textsuperscript{156} Baum, \textit{supra} note #153.
and CARB, it is more likely than not VW would still be producing diesel vehicles with its deceit device. If character is who you are in the dark when no one is watching, what is Volkswagen’s character? Is its corporate ethical character such that it poses a real and present danger to American consumers? It posed this danger for six years until caught by CARB and the West Virginia University’s Center for Alternative Fuels, Engines, & Emissions publishing of ICCT laboratory and road results.

The Department of Justice criminally prosecuted accounting firm Arthur Andersen in 2002 for its ENRON related misconduct that resulted in the firm’s economic death. Over 28,000 Andersen employees lost their jobs and clients dropped them like a hot rock. What business wanted Andersen as their auditor after their criminal conviction? Even though the U.S. Supreme Court would ultimately overturn Andersen’s conviction based on flawed jury instructions, there was hardly any Arthur Andersen left to re-prosecute. DOJ elected not to shoot a dead accounting horse.

Should similar unethical and unlawful business conduct be punished by EPA’s withholding COCs from any future VW product? While VW will survive and continue to compete in non-U.S. markets, the loss of the entire U.S. market for all their vehicles would be substantial. They will lose their 70% share of the U.S. diesel market. Has VW earned this penalty? Knowing the relativistic business ethics that VW management and engineers practice, and their proclivity to deceive and lie in the face of investigation, does this pose a public health and safety threat to U.S. consumers? Given the size of the company, the gravity of its

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deceitful conduct past and present, and the predatory nature of its management style, does risk of
termination exceed the consumer benefit of market access and participation?

At a minimum, the CAA requires a recall order to fix the emissions problem in the U.S.
diesel autos irrespective of cost. How big a problem are the emissions anyway? While the
recall is already ongoing to prevent future unlawful emissions, another form of remedy for past
transgressions has surfaced that merits consideration. Research discloses that the average car
emits 20 pounds of CO2 for every gallon of gasoline it burns, which comes to approximately 6
tons of CO2 emitted per year. By anyone’s calculation, that is a lot of carbon dioxide.

Consumer Reports says the average life expectancy of a new vehicle these days is around 8 years
or 150,000 miles. Recall from the earlier discussion that NOx has a greater negative
environmental impact than CO2. According to California Carbon Dashboard, selling a carbon
credit at $12.34 per ton and multiplying that by 482,000 diesels sold in the U.S. with the deceit
devices, then factoring in the emission pollution of 40 X (times) the average car, gives us a total

administration admitted to installing software into its petrol diesel vehicles to mislead low fuel economy and CO2
emissions ratings. Estimates of 11 million vehicles containing the misleading software were sold worldwide and
have led to a massive vehicle recall in the United States. On November 19, 2015, Volkswagen officials informed
EPA that the defeat device has existed in all of its U.S. 3.0 liter diesel models since 2009 (EPA, 2015) after nearly a
year of denying deception on emissions. See also EPA, Volkswagen Light Duty Diesel Vehicle Violations for Model

160 CAA, sec. 207(c)(1), 42 U.S.C. Sec. 7522(a)(1): “[R]equires the Administrator to base a recall order on a
determination that a substantial number of in-use vehicles or engines within a given class or category of vehicles or
engines, although properly maintained and used, fail to conform to the regulations prescribed under section 202
when in actual use throughout their useful lives. After making such a determination, he shall require the
manufacturer to submit a plan to remedy the nonconformity of any such vehicles or engines. The plan shall provide
that the manufacturer will remedy, at the manufacturer’s expense, all properly maintained and used vehicles which
experienced the nonconformity during their useful lives regardless of their age or mileage at the time of repair.”

161 Interview with Adam Stein, Vice President for Marketing of Terrapass, and Tom Boucher, President and CEO of

162 Herb Weisbaum, What’s the Life Expectancy of my Car?, ConsumerMan on NBCNews.com (Mar. 28, 2006),
http://www.nbcnews.com/id/12040753/ns/business-consumer_news/t/whats-life-expectancy-my-
car/#.Vyy_Sk0UW9J.

163 Nitrogen, supra note 82.
environmental impact by VW of approximately $11.4 billion.\textsuperscript{164} By analogy, this is a legitimate basis for demonstrating damage to the environment separate from potential public health costs.

The penalty options outlined above are not exclusive; they can be combined in one or more ways. The quintessential question presented is what is an appropriate remedy for resolution of the VW ethical and legal misconduct? If it is true that rehabilitation begins with an admission of guilt, VW has apologized for a variety of things, but continues to deny at the highest levels that it deceived anyone. This might be considered a continuing offense in that VW’s management culture will not permit itself to admit ethical and/or legal error in judgment.\textsuperscript{165} Without a clear admission of guilt and assumption of responsibility for their conduct, VW as a company cannot bring itself to reascend the ethical plateau it descended from so long ago. While VW apologies are made, when asked what they are apologizing for, VW steadfastly refutes that any deception or intent to cheat occurred on their part. This is the source of their past, present, and future problem of appropriate ethical decision-making.

It took until December 10, 2015, for Volkswagen Chairman Hans-Dieter Pötsch to even admit this scandal had occurred under his leadership. The Chairman had also said that some divisions tolerated breaches of rules, a fact so obvious his sudden realization of this in December 2015 is surprising, if not more.\textsuperscript{166} In view of VW’s continued denial of an intent to deceive in face of the aforementioned facts and the removal of the USA VW CEO Michael Horn when he


\textsuperscript{165} Michael Taylor, \textit{Dieselgate: Bosch says VW knew}, (Sept. 28, 2015), http://www.motoring.com.au/dieselgate-bosch-says-vw-knew-54142/. Evidence has come out showing that as far back as 2011 VW’s own technicians had warned senior management that its software was illegal. Still they continued on with production. Also in 2014, as referenced earlier, questions from technicians in the U.S. about the cars emissions were pushed aside when the company said it had fixed some “malfunctions” within the technology, and that the cars were fine.

\textsuperscript{166} McGrath, \textit{supra} note 3.
admitted to perhaps, a bit too much: “Our company was dishonest; we screwed up.” VW still does not concede it did anything wrong. The VW culture of ‘groupthink’ remarkably does not appreciate the gravity and rapacious nature of its ethical misconduct.

IX. WHETHER ‘TIS NOBLER TO SUFFER THE SLINGS OF ARROWS.

Connecting VW to its historic Nazi foundation and its ‘groupthink’ may seem provocative; perhaps not when considering how dangerous a business the size of VW poses to a nation-state like Germany. ‘Groupthink’ brought the world to the brink of destruction 1939-1945. It continues to present a clear and present danger to ethical business decision-making in the market place and in regulating for the public health and safety. John Locke prophetically thought about VW when he wrote tyranny is defined as “the exercise of power beyond right.” Corporations, as VW has demonstrated, “breach the social contract, exercising “power beyond right,” when they violate social values, endanger the public, or act illegally.”

Based on the evidence presented, Volkswagen has earned the most formidable civil penalty a company can receive. A business makes contrition with a check. Given the gravity of the offense, VW needs to make an international statement. In view of VW’s continuing offense of denial of deception and failure to recognize and remedy the ethical culture present and past at VW, its products should be banned from U.S. markets for five years. Its readmission should be

conditioned on its full and complete admission of deceptive intent and fraudulent obfuscation of
past ethical and legal misconduct. To whom much is given, much is expected. While VW is a
large company, it is still infected with a `groupthink’ culture it needs to eradicate from the top
down. It continues to reward bad behavior as 2015’s bonuses of $74.1 million to its top
management (to include its departing CEO Winterkorn) demonstrate in the face of this business
scandal.\textsuperscript{170} The public, not to mention its shareholders, have a right to expect more from VW’s
leadership. Ethics requires accountability to be intentional.\textsuperscript{171} Unlike ‘groupthink’,
accountability remains elusive at Volkswagen.

\textsuperscript{170} William Boston, \textit{VW Moves to End Clash with Labor Over Brand Name}, Wall St. J., at B7 (Apr. 12, 2016).
\textsuperscript{171} ETHICS 101, \textit{supra} note115, at 51.