Ethics and Justice – What Penalty Should Volkswagen Be Compelled to Pay for its Unethical and Unlawful Conduct, and on What Basis?

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In September 2015 Volkswagen disclosed that nearly 11 million diesel VW automobiles were intentionally equipped with "defeat device" software that allowed the company to cheat emission testing. VW engineers were concerned that the only way to pass U.S. emission standards was to use a system normally utilized in much larger diesel engines. The larger diesel system would involve an increase in cost which VW was unwilling to accept due to the competitive U.S. cost market. This led VW to seek an alternative, and the software emissions cheat system became the favored option. What should VW's penalty be for unethical and unlawful conduct?

INTRODUCTION

Volkswagen (VW) is the third leading automobile manufacturer in the world. (World Ranking of Manufacturers, 2013) In September 2015 VW disclosed, under considerable scrutiny, that nearly 11 million diesel 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's emissions were being tested, and could then lower the nitrogen oxides that were emitted.

A subsequent investigation disclosed VW intended to capture the U.S. diesel automobile market. The company sought to develop a new diesel engine that would be superior to that of its competitors. VW engineers were concerned that the only way to pass U.S. Environmental Protection Agency (EPA, 1918) emission standards was to use a system normally utilized only in 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 and a software emissions cheat system became the favored option.

Approximately 482,000 VW diesel autos equipped with the defeat software were sold in the U.S. While recalls are routine when vehicular defects are discovered, owner concerns with loss of vehicle value and environmental pollution risks require additional consideration. In consideration of VW's massively fraudulent campaign of misinformation to both the U.S. and European consumer markets, one might assume that sweeping punitive fines would be the ideal course of action.

What should VW's penalty be for unacceptable behavior that violates ethical norms and constitutes unlawful conduct? What is the calculation basis for determining an ethical and just retribution? Should it be an economic death sentence, punitive and deterrent fines, an 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 regulators should consider in exchange for transgressions.

VW stockholders played no part in the misconduct, yet they are the ones most affected by financial penalties. Is it ethical that shareholders should pay serious economic penalties for the actions of management, to include its then CEO Martin Winterkorn? What retribution should managers pay? While the CEO and senior engineers have left VW, clearly many others knowingly and willingly played significant roles in the implementation of this "defeat device" to deceive regulators.

While the Nazis founded VW in the 1930's, the "groupthink" exhibited then is still in practice now. By "groupthink" in the VW context, we mean "the company line" no matter how unethical or unlawful that conduct may be. "Groupthink is a phenomenon where people tend to conform to group decisions to avoid feeling outcast." (Psychologenie, 2018) It is also referred to as herd mentality or "decision-making groups' extreme concurrence seeking (conformity) that is hypothesized to result in highly defective judgments and outcomes." (Psychology, 2018)

History may not repeat itself, but it does rhyme. Emily Pleiss in an insightful analysis explains the cultural dangers of groupthink. "When Hitler took power, the Reich Ministry of Public Enlightenment and Propaganda took control of the media. The end goal of this propaganda was to both promote the Nazi ideology and to dehumanize other groups. The propaganda was effective, and put Germany under the influence of groupthink. Another symptom of groupthink is the belief in inherent morality a person affected by this will make bad decisions because they believe that their cause is righteous." (Pleiss, 2015) Does the alleged groupthink culture that rhymes with an earlier era pose a continuing danger at VW? If so, what should the ethical and legal rehabilitative message to VW be?

The intentionality and gravity of this corporate groupthink misconduct is serious on an international scale. It suggests here that VW is in need of a significant emotional event to modify its groupthink behavior. What follows is an analysis of the groupthink problem followed by options to address behavior modification. "Painful as it may be, a significant emotional event can be the catalyst for choosing a direction that serves us and those around us more effectively. Look for the learning." (Alcott, 2012)

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, society imposes sanctions. These sanctions apply to business just like ordinary citizens. While Europe has different standards in vehicle emissions, 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 the public health responsibilities that both the state and federal government share. (DieselNet, 2018) 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." (Arouet, 2007) Which legal terms apply to VW?

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. The EPA's regulatory framework for vehicles begins with its certification program. The EPA administers a certification program by issuing certificates of conformity (COCs) to ensure that all manufactured vehicles, including light-duty vehicles, satisfy current U.S. standards for air pollution. (Steiner, 2016)

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. 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. VW violated the CAA by submitting false COC applications in order to mislead the EPA to believe that vehicles applying for COCs met applicable federal emission standards, and therefore qualified for 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." Furthermore, the implementation of the CFR prohibits the use of a defeat device in any new light-duty vehicle (passenger car). 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). While VW executives may quibble over what does and does not constitute an emissions control device, the 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." (40 C.F.R. § 86.1803-01) The CAA contains an express prohibition against the sale of cars containing such devices. (42 U.S.C. Sec. 7522(a)(3)(b))

A third VW violation involved failure to provide a list of all AECD's installed in its vehicles with its COC application. Had VW listed its defeat device, regulators should have caught on sooner that the emissions deception game was afoot. (40 C.F.R. § 86.1843-01)

Aside from the intentional legal violations, VW's conduct raises extremely serious ethical considerations. (Vlasic, Kesslersept, 2017) "Laws and regulations are established by government to set minimum standards for responsible behavior..." (Farrell, et al, 2008) while ethics refers to rules or guidelines that establish what conduct is right and wrong for individuals and for groups. For years VW knowingly, willingly, and intelligently chose to deceive its consumers and the general public violating both standards for acceptable conduct.

THE FACTS

VW's Goal

As is often the case in business, what ceases to grow begins to decay. In 2005, Volkswagen executives expressed their goal of surpassing Toyota as the world's largest auto manufacturer. (Hakim 2015) VW management felt that its unique style of industrial development could allow it to surpass any competitor. In particular, its 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. VW executive management took this practice to the next degree. "They only know one way of management, be aggressive at all times," said a longtime VW executive. This type of culture left no room for people to "stand up for their beliefs" or "do what is right." (Ewing, Bowley, Dec. 13, 2015)

A decade ago, VW had a small market share in the U.S. In trying to surpass Toyota as the largest auto manufacturer, VW was willing to cut corners in order to save money. At the time, its profit margin for America sat at only two percent. However, VW's problem was not simply one of ambition, it was an issue of culture; a culture that encouraged employees to follow orders, regardless of their ethical ramifications. VW demanded and received unquestioning obedience from its employees. One critic noted, "VW had this special culture, it was like North Korea without labor camps." (Useem, 2016) Temptations to do wrong came from ethical traps such as money, competition, rationalization, conformity, obedience, and worst of all, the aforementioned groupthink. The instilled groupthink herd mentality of conformance at all levels of management and laborers in face of blatant illegality and unethical workplace demands, suggests something is seriously wrong about VW's culture. All of these factors created irresistible temptations for management, employees, and VW's subcontractor Robert Bosch.

By 2005, VW made an ambitious commitment to push into America with a new technology—clean diesel. Once fully developed, this new technology would meet the high American regulatory standards regarding nitrogen oxide emissions (NOx). VW was recently successful in entering 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.

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 was yet to be determined.

Strategy

In 2004, the U.S. imposed stricter emissions standards. This created an engine problem for VW diesel autos because the 2004 engines did not meet these new emission standards. (Hotten, 2015) 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. 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 result in an additional 300 euros in cost (\$335 in U.S. dollars) per vehicle, an amount VW finance officials found too great at a time when companywide cost-cutting 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. (Staff report, 2015)

Mesmerized by VW's expanded technical capabilities and obsessed with the prospect of becoming the world's largest manufacturer, Winterkorn sought to enact a 30% reduction of 2006 carbon dioxide (CO2) emissions test results. (Since NOx and CO2 are emitted together, the reduction applied to both.) (Middleton, 2015) 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 that consumers and publications truly believed that VW had found a way to lessen emissions in its vehicles, culminating in VW's being named "Green Car of the Year" in 2008. (Staff report, 2015)

To fully comprehend VW's ethical transgression, one must understand how an emissions system is designed 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 how to carry out its functions. Since regulations on greenhouse gas emissions have tightened in recent years, all manufacturers must 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. (Collins, 2015)

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. (Hotten, 2015)

The 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 EPA. (Hotten, 2015)

The software was originally developed by a VW parts contractor Robert Bosch for testing purposes only, and it is believed that Volkswagen executives were aware of the "defeat device software" as early as 2007. A letter from Bosch to VW in 2007 warned the company not to use its testing mode for vehicles that it intended to sell, noting that the test mode changes were meant for VW's internal testing only. This means that VW may have been considering how to leverage the software at least two years prior to 2009 when it introduced its diesel vehicles containing the defeat device software. For what other reason would Bosch have written his letter? The fact that he was aware of VW's plans and cautioned the company

against using the software is evidence that the intent to deceive was widespread throughout the company and not limited to just a few engineers. (Chappell, 2015)

VW used an engine control unit designed by Robert Bosch that incorporates 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 VW used it as their "cheat mode" for emission tests. According to Consumer Reports, VW lied about the eleven million "clean diesel" cars that were polluting the air and tried to cover itself by hiding Bosch's technology. (Bartlett, 2015) During this time (2009-2014), more than eleven million vehicles were sold in Europe and the U.S. with this installed software. Utilizing this software, these vehicles were emitting forty times the U.S. mandated restriction emission standard. (Krall, Peng, 2015)

Before external non-European regulators discovered the deception, how did VW manage to escape German auto emission regulators? VW was able to get away with falsified documentation because Germany's Federal Motor Transport Authority (KBA) only relies on statistics provided by the manufacturer's tests. (Ratcliffe, Nickerson, 2016) In essence, the German government accepts whatever information the domestic manufacturer provides, effectively placing the wolf 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." (Aityeh 2016) When considering all diesel vehicles sales in the U.S., "VW makes up about 39 percent of all diesel vehicles sold." (Duffer 2015) So how was this almost perfect subterfuge finally exposed?

Deception, Denial, Dishonor, Distrust

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 "[P]rove that diesel cars in the American market were cleaner than in Europe principally because U.S. emission standards are stricter." (Sharman, et al, 2015) For example, the NOx U.S. standard is 31 mg per km versus 80 mg per km in Europe. 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, the VW cars performed differently 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. (Sharman, et al, 2015)

In March 2014, the researchers presented their findings to a conference of academics, regulators, and industry delegates. Two months later, they also published an online report. (Sharman, et al, 2015) Predictably this information made its way to Washington, D.C. and to the EPA.

The EPA Begins to Dance with Volkswagen

The EPA and VW discussed the emissions questions for over seven months with VW claiming that the tests were merely a "technical glitch." VW denied that any defeat device had been installed in the affected vehicles for nearly a year since the first findings in the ICCT investigation. VW executives explained that the discrepancies in pollution tests for its diesel cars on the road relative to the lab were indicative of a technical error and not a deliberate attempt to deceive Washington officials. By December 2014, VW recalled nearly all of its diesel engine cars sold in the U.S. in an apparent attempt to address the problem. While this measure involved nearly 500,000 cars, it turned out to be yet another diversionary tactic. (Vlasic, 2017) As early as 2006, a top VW technology executive had prepared a PowerPoint presentation discussing how it could cheat U.S. emissions tests. (Ewing 2016) This proves that VW was aware of the rampant misrepresentation afoot.

When the recall failed to appreciably change the emissions results, the EPA became more intent. The EPA threatened to withhold approval for the sale of all 2016 VW diesel vehicles. On September 3, 2015, VW confessed that it had installed rogue software in the form of a "defeat device" in its Audi and VW

diesel engines. (Bowley 2015) The confession was aggravated by the fact VW had been knowingly engaging in deception throughout the prior year of EPA-VW discussions concerning the emissions problem. (EPA, 2015) VW 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 discovered the discrepancies. (Thanawala 2016)

Robert Bosch - Co-conspirator or Innocent Bystander?

Groupthink or allegiance to the company strategic objective no matter how unlawful and/or unethical, characterized VW's management plan. In 2011, one of VW's own engineers warned the corporation of its illegal use of the Bosch software in its diesel engine autos. (Thanawala 2016) Nevertheless, with fuel economy being a vital factor in the car purchasing market, VW sought to become the world's leading auto manufacturer despite the legal business rules. A leading component of its strategic objective involved capturing the majority of the U.S. diesel vehicle market. In furtherance of its aims, VW elected to knowingly deceive automobile buyers and regulators. (Thanawala 2016)

Despite his attempts to warn 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 VW, and the supplier responsible for producing key components of the diesel engines in several VW models. (Stewart, 2015) VW had been doing business with Robert Bosch for years. In 2007, VW inquired into buying 11 million licenses of Bosch's software for the purpose of hiding the emissions issue in their vehicles. (Stewart, 2015) Bosch sold them to VW.

When interviewed by the German newspaper *Bild am Sonntag* in 2007, Bosch stated that he 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. (Reuters, 2015) 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." (Stewart, 2015) Bosch's liability is based on his purported knowledge that VW was using the defeat device software that would produce false emission reports. (Boston, Dec. 16, 2015) Bosch's production and continued supply of the software, done so with the knowledge of VW's intended unlawful use, is alleged to have aided and abetted VW's fraud and subterfuge. (Shepardson 2015) 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." (Shepardson, 2015)

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." (Steinhauser, Dec. 16, 2015) Bosch perceived no ethical or legal obligation to notify regulators or consumers of the defeat device contained in VW autos. While Bosch admitted to providing the software for its unlawful purpose, he reminded prosecutors that he was not responsible in how it was used. (Alesi, 2015) Bosch remains under investigation.

The Device is Not a "Deceit" or "Cheat Device"

While VW 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 concerning NOx emissions. It also knew that it was incurring enormous marketing costs in furtherance of that deception advertising "clean diesel technology." In fact, those same "clean diesel" autos emitted forty times that of the U.S. emissions regulatory ceiling. While many at Robert Bosch knew this, how many VW engineers, workers, and executives were aware of the misrepresentation?

By 2015, scrutiny over the vehicles in the U.S. had been increasing. After further testing and a demand for answers, VW felt compelled to come out of hiding. Running out of excuses and facing an EPA threat to ban the sale of all of its 2016 diesel autos in the U.S., VW confessed that it had been cheating the regulatory system all along. (Russell, et al., Mar. 9, 2016) Bad news never gets better with

age. But for the moment, when VW's bad news confession was delivered on September 3, 2015 to the EPA, what was VW's posture when caught in their deception?

Denial

For the year leading up to September 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. (Hotten, 2015) While suspicions first arose in 2014 when U.S. regulators raised concerns about the emissions levels of VW's clean diesel vehicles during testing, VW dismissed these concerns citing "technical difficulties" and "unrealistic real-world conditions." (Hotten, 2015)

In essence, "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." (Fleming, Sep. 22, 2015)

"Our patience with Volkswagen is wearing thin," Eric T. Schneiderman, the attorney general of New York, said in January 2016. "Volkswagen's cooperation with the state's investigation has been spotty—and frankly, more of the kind one expects from a company in denial more than one seeking to leave behind a culture of admitted deception." (Ewing, 2016, p. 229)

What is truly remarkable is VW's current posture in the wake of such damning conduct. Matthias Müller became the new VW CEO succeeding Winterkorn after his forced resignation in December 2015. After the fallout from the emission scandal, Müller subsequently stated that VW "didn't lie" to regulators, and dismissed the notion that the company tried to deceive regulators. (Automotive 2016) This is the exact opposite response one would expect from a new CEO at a company that was just embroiled in a major scandal which culminated in the ouster of the previous CEO.

Mr. Müller, closed ranks behind his predecessor arguing the company line that VW did not engage in any deceit. Facts, uncovered through diligent investigation, have a way of undressing the most ardent of CEO's protestations to the contrary. Martin Winterkorn, VW's CEO from 2007 to 2015, was subsequently charged with conspiracy and fraud with respect to the company's efforts to cheat on dieselemissions testing. U.S. Attorney General Jeff Sessions announced, "The indictment unsealed today alleges that Volkswagen's scheme to cheat its legal requirements went all the way to the top of the company." (Roberts 2018, B1) Winterkorn is alleged to have been informed by company employees of the company's intentions to defraud U.S. regulators by cheating on emissions tests. He approved such efforts along with other senior VW executives. For the conspiracy count alone Mr. Winterkorn would face 5 years imprisonment and a \$250,000 fine, and 20 years imprisonment and a \$25,000 fine for each of three wire fraud counts. (Roberts, 2018, B1)

Admittedly such indictments of senior business executives are extremely rare, especially in Germany. It is uncertain whether he will face American justice and stand trial. A German Justice Ministry spokesman announced shortly after the U.S. indictment was unsealed that Mr. Winterkorn would not be extradited from Germany to the U.S. (Boston, May 5, 2018, B3) One wonders why not. Does the groupthink, regardless of culpability involving Germany's largest company, extend outside VW? Nevertheless, outside Germany Winterkorn could be subject to extradition by any nation having an extradition treaty with the U.S., like other European states. Non-extraditing countries are more often found in developing states such as Russia, China, and Saudi Arabia. (Ewing, 2016, 229)

Not unexpectedly, the president of Volkswagen of America was called to testify before Congress about what he knew and when. Coming from a different culture, he took another approach. President Michael Horn, summed up VW's leadership dilemma by stating: "On behalf of our company, and my colleagues in Germany, I would like to offer a sincere apology for Volkswagen's use of a software program that served to defeat the regular emissions testing regime." At an earlier event in New York he confessed, "We've totally screwed up." (Ewing, 2016, 216) A few months later, he was gone, perhaps for violating VW's groupthink. (Beene 2016)

One redeeming action is VW's board of directors fired Müller in April 2018. Shareholders appear tired of the endless litigation, investigations, and mounting fines and settlements. (Roberts 2018)

Groupthink in Action

The British House of Commons Transport Select Committee held hearings to investigate the defeat device and VW's behavior since VW diesel autos equipped with the same software were also sold in Europe. Testimony of British VW leaders confirms a systemic mindset of obfuscation, denial, and unethical behavior. Mr. Paul Willis, Managing Director, VW UK, and Oliver Schmidt, Engineer, VW 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 VW Group it is not a defeat device."

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 the British VW executives conflicts with commonly accepted norms of business behavior. Such conduct tends to aggravate their current situation while ostensibly doing little to support their case. Nonetheless, the British VW executives continued to mine the 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 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." (Transport, Jan. 25, 2016, HC 495)

VW executives do not understand the ethical questions. When the "warning" light finally flickers, they do not know what to say. Given the breadth and depth of VW's issues, it is remarkable that so few have been held accountable for this unethical behavior. This may highlight the groupthink defense dilemma. After all, safety does lie in numbers. Only nine managers have been suspended, and approximately fifty employees have admitted to being aware of the emissions misrepresentation with no reprimand. When Siemens, another German company, in 2006 was involved in a bribery scandal, it "...disciplined nine hundred employees, many of whom were dismissed." (Ewing, 2016, 257)

Despite his catastrophic tenure at the company helm, departing German CEO Winterkorn received 7.3 million Euros in 2015, including 5.9 million in performance bonuses. His successor Mathias Müller will not be as fortunate. A portion of his performance bonuses will be deferred until 2019 and due only if the company's shares see a rebound. (Boston 2016)

The Carnage – Cause and Effect

When the smoke clears from the fires of VW's ethics breach, the burnt parties will inevitably and invariably be the shareholders. How serious are the economic burns? As of February 2018, "U.S. authorities have extracted \$25 billion in fines, penalties and restitution from VW for the 580,000 tainted diesels it sold in the U.S." (Parloff, Feb. 6, 2018) That is all shareholder equity. And then, the loss of brand value in the U.S. and elsewhere will be considerable.

It is understandable that the U.S. Department of Justice (DOJ) and the EPA felt deceived by VW since the emissions inquiry began. Decisions, specifically strategic decisions to intentionally obfuscate and deceive, have consequences. The DOJ, on behalf of EPA, has filed civil suits against VW that could subject the company up to 45 billion dollars in fines. 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. (Bowley, Nov. 3, 2015) With respect to Germany in particular, VW's providing false emissions testing data to their KBA federal regulator will have consequences as well.

In addition, more than 500 class action lawsuits have been filed against the company by owners, lessors, used car dealers, competitors and shareholders. (Bowley, Nov. 3, 2015) What might have initially looked like a second degree economic burn has conflagrated 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 defeat device software 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. (EPA) In particular, evidence shows that these devices can be found in VW's Polo, Golf and Passat, and also in the Audi A1 and A3. (Bowley, Nov. 3, 2015)

Emissions Impact

Besides the economic damage to shareholder equity, the purpose of environmental standards and regulation is directly related to public health. Long-term exposure to nitrogen oxide is known to cause inflammation of the airways and more serious respiratory conditions along with heart complications. (Topham, 2015) 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." (EPA) 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. In London, more than 9,500 premature deaths in 2015 have been linked to the exposure of nitrogen oxide, so this obviously matters. (EPA) According to a study found in the *International Journal of Environmental Research and Public Health*, VW diesel produced NOx will result in 5 to 50 people suffering premature deaths from respiratory ailments while another 250-1000 people will suffer respiratory ailments including asthma and chronic bronchitis. (Ewing, 2016)

The Danger Posed by NOx

Nitrogen oxides are, in fact, part of 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 NOx in the U.S. because it is often orange-brown in color. When it reacts with air, it creates what we recognize as smog, which often appears in highly populated areas such as Atlanta and Los Angeles. Side effects of living in an area with heavy pollution can include: asthma attacks, inflammation of the lungs, and even lung cancer. These side effects affect children and elderly people the most. (Kukrija 2016) For these reasons, regulatory limits are enacted to protect public health.

Nitrogen oxides proliferate at the very high temperatures that occur inside diesel engines. When a diesel engine is running, the cylinders become hot enough to fuse nitrogen and oxygen from the atmosphere into NOx molecules with all their dire side effects. (The catalogue bears repeating: asthma, chronic bronchitis, cancer, risk of heart attacks, and such environmental effects as smog formation, acid rain, and accelerated climate change.) (Ewing, FASTER, 2016)

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 pervasive role in bringing about environmental decay. In essence, these VW vehicles were not only proven to be fraudulent from a business ethics (right and wrong) standpoint, it appears that VW's misrepresentation now threatens to severely damage our environment. (Sandbach 2007)

Shareholder Loss

Under U.S. law, VW can face a penalty of \$37,500 for each vehicle that was found to be in violation of EPA standards, potentially totaling up to \$18 billion in fines. There is also the impact on shareholder stock price. The initial drop in stock price alone eviscerated \$17.6 billion in shareholder value. After VW's share price dropped nearly twenty-three percent with a market value loss of \$42 billion by October 2, 2015, VW management was compelled by investors to hire the American law firm of Jones Day, which specializes in white-collar crime, to investigate the entire matter. (Goodwin, Stevens, Sep. 21, 2015)

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. (Boston, Apr. 14, 2016) Recall "Having used deceit to meet the United States stricter limits on nitrogen oxides, Volkswagen doubled down by aggressively promoting its cars as environmentally virtuous." (Ewing, Faster 2016, p. 255) VW is now expected to offer U.S. individual vehicle owners \$5,000 each in compensation. (Bomey, 2016) VW intends to also offer U.S. owners the option to sell their car back to VW, or have it modified to meet EPA standards. Those that have leases can simply return the car with no financial obligations. To buy back all the U.S. 482,000 VW diesels, fully equipped with their defeat devices, Kelly Blue Book analysts estimate the cost to VW will be \$7.3 billion. (Randazzo, 2016)

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 2016 they had until April 21, 2016 "to announce a concrete proposal for getting the polluting vehicles off the road." (Randazzo, 2016) European regulators have finally entered the fray as well. On April 22, 2016, German authorities notified Daimler AG, Volkswagen, and General Motors Co. to recall 630,000 diesel-powered cars sold in Germany in order to repair defective emissions controls. (Boston, Apr. 23-24, 2016) 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, VW may not be a good investment prospect.

Brand Negativity

As a consequence of the increasing brand negativity, VW has experienced a two percent loss in sales. VW 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. In 2015, it set aside \$18.2 billion as a one-time charge to deal with the defeat device aftermath, after it had already set aside \$7 billion to cover such costs. (Bomey, Apr. 23, 2016)

Thirty percent of VW's market value has been erased since the scandal broke. Furthermore, VW withdrew its application to have its diesel vehicles approved by the EPA for sale in the USA for 2016. Moody's downgraded VW's credit rating because the potential cost of the scandal is estimated to be into the tens of billions of euros. (CNNMoney, Nov. 25, 2015) VW is expected to survive the financial onslaught of litigation and sanctions coming at them, but with significant damage to its reputation and possible future success.

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." (Cremer, Mar. 20, 2016) Matthias Hellstern, managing director of Moody's corporate finance team in Frankfurt, told Reuters "...Earlier this month [CEO] Winterkorn's successor, Matthias Müller, 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." (Cremer, Mar. 20, 2016)

Faced with a sea of litigation and regulatory attention, VW has abandoned its goal to become the world's largest automaker by 2018. VW Chief Executive Müller told a meeting of VW's supervisory board in Wolfsburg, Germany, on April 22, 2016, "There is no question that the diesel issue is a heavy burden on the company's results." (WSJ Asia, Apr. 25, 2016) Müller also 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. (WSJ Asia, Apr. 25, 2016)

WHY DID VOLKSWAGEN DO IT?

After reading this far, the question that one needs to ask is "why did VW decide to cheat?" The 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. (Goodman, Dec. 25, 2015) They chose not to compete, nor to cheat. There are three reasons why VW willingly decided to violate ethical business norms and cheat. John C. Maxwell, in his business "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." (Maxwell, 2003, p. 3-5)

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, "engineers decided to cheat because they couldn't find a technical solution within the company's timeframe and budget to build diesel engines that could meet US standards." (Goodman, Dec. 25, 2015) In conformity with Maxwell's first reason for business ethics violations, VW chose to act out of convenience. Faced with the pressure of an unmatchable timeline and managerial refusal to incur \$335 in increased vehicle costs to upgrade each of its diesel engines to meet EPA emission standards, VW opted to game the emissions tests by seizing and installing the Bosch testing device. Even when VW engineers did find a solution, they decided to keep cheating because it was easier. (Goodman, Dec. 25, 2015)

What about Mr. Maxwell's #2 response? "We do what we must to win." Ambitious, demanding leadership created the pressure necessary to commit unethical acts at Volkswagen. Emission standards for NOx from diesel engines in Europe are much less restrictive than standards in 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 a two percent market share. The plan was to create and perfect a new technology called "Clean Diesel." The problem was that it 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 termination, no one at Volkswagen "had the courage to admit defeat." (Smith, Parloff, 2016) They thusly decided to implement the defeat devices.

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. This corporate culture of pressure, fear,

and demand allowed them to rationalize their unethical behavior. (Useem, 2016) Curiously, this is not the first scandal in which VW has been involved. It has participated in instances of corporate espionage and criminal abuse well before 2005. (Smith, Parloff, 2016) In 2007 Peter Hartz, VW personnel director, was given a two-year suspended sentence for breach of trust in a 2005 bribery scheme. It involved company payments to members of the company's works council who were lavishly entertained on paid foreign trips and furnished with sex parties and prostitutes. (Ewing, 2016) During the same year a senior VW executive was involved in a corruption scandal in India where he promised to build a factory there in return for a two million Euro payment. (Financial Times, Sep. 23, 2015) The toxic culture at the top of the VW corporate ladder affected lower levels of auto production.

A third reason given by Maxwell to explain unethical decision-making is that "we rationalize our choices with relativism." (Maxwell, 2003) The VW engineers rationalized that it was right to cheat because there was no other way to get to a solution given the constraints. They maintained that this was the proper solution even when presented with an alternative, i.e., \$335 engine component. (Goodman, 2015) However, history has shown time and time again that when one tries to cut corners in the business world, one will eventually find himself in trouble. (Maxwell, 2003) A culture of forced obedience stifles employees' willingness to stand up for rectitude. In an atmosphere where employees are worried about losing their jobs if they do not do what they are told, employees are more likely to act in blatant disregard of ethical norms. (Ewing, Bowley, 2015)

Dr. Friedman and Volkswagen Ethics

Dr. Milton Friedman, the late Nobel prize-winning economist, once observed, "The manager is the agent of the individuals who own the corporation or establish the eleemosynary institution, and his primary responsibility is to them." (Friedman, Sep. 13, 1970) VW's implementation of Friedman's theory, bred a culture of pressure and competition, argue New York Times reporters Jack Ewing and Graham Bowley. (Ewing, Bowley, 2015) Pressure started at VW around the time when fuel economy became a vital factor in the vehicle purchasing process. (Spence, 2015)

As identified earlier, VW's problem was that it could not find a solution that met emissions standards without using a device that cheated. Once VW did find a solution, it 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 and its shareholders, but also the public and the environment. (Goodman, Dec. 25, 2015). VW's corporate culture has been described as "confident, cutthroat, and insular." (Ewing, Bowley, Dec. 13, 2015) When you signed up to be a VW company executive or employee back then or now, you were not just a member of a team working towards a common goal, you were enlisting in a quasi-business cult. This faddish devotion viewed itself as that whatever leadership dictated, regardless of legality or ethicality, was the expected and accepted company norm. Cutthroat behavior was justified by the ends sought to be the number one auto manufacturer in the world. The VW family has proven to be remarkably insular sticking to the company mantra even though viewed externally as morally and ethically wrong. Those that refuse to lash themselves to the doctrinal mantra "VW did not install defeat devices in our diesel engines" were summarily, fired like VW American CEO Michael Horn.

This culture has continued throughout the 78+ years VW has been in operation. (Useem, 2016) This type of culture reaches far beyond corporate management. Engineers and employees throughout the organization are aware of the expectations management has for its employees. This type of culture can only continue for so long before ethics no longer play a vital role in decision-making. "Written or unwritten rules of behavior that would have restrained the Volkswagen engineers were weak or nonexistent. As Volkswagen later admitted, there was a tolerance for breaking the rules and a lack of checks and balances." (Ewing, 2016, p. 124-125) This raises the question whether an ethical culture ever existed at VW given its history and executive management style. It has been said that this culture

contributed to the recent law-breaking events explained throughout this treatise. Given similar stories in its history, this allegation seems plausible.

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. Given VW's history and known insular management style, it is curious how VW created and maintained "trust rapport" with its regulators. The fact is—they did not. VW cheated their EU regulators just like the EPA.

In Europe, use of software to mask emissions output was a misdemeanor, with no grave penalties. The regulations of the European Union and the United States prohibiting defeat devices used almost identical wording. But EU law made no provision for penalties. The worst that could happen would be that Volkswagen would be forced to recall cars to make them compliant. Oversight was also weak. Emissions testing was done by outside contractors hired by the car manufacturers.... (Ewing, 2016, p. 155)

A British cabinet secretary described the damage done by VW's ethical trust breach. Testifying before the House of Commons Transport Select Committee, Patrick McLoughlin, Secretary of State of 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 18th [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." (Transport, Jan. 25, 2016, p. 16-17)

In assessing McLoughlin's statement, it would serve well to revisit the concept of Utilitarianism. Utilitarianism 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." (Kay, 1997) 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 potentially every living organism on Earth.

Amidst the growing controversy, the VW board of directors commissioned Jones Day, an American law firm that specializes in white-collar crime, to investigate and prepare a report for the board detailing the events that brought about this legal and financial catastrophe. 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 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 seventy percent of the employees mentioned unrealistic performance demands as the common cause to break ethical standards. (Code, 2005)

"Stretch goals are very useful," says David Bach, a German born-professor at Yale University School of management. "Precisely because they generate a lot of pressure, you have to make sure they are coupled with a clear sense of what the boundaries are. "We will grow, but we will do so in a way that is true to our brand." Ensuring those

values is more important than reaching the goal. You should never let the goal itself get the better of you. That was just missing at Volkswagen." (Ewing, 2016, p. 151)

The 78-year-old company's unusual culture described as confident, cutthroat, and insular, has come under scrutiny as potentially enabling VW's lawbreaking behavior. With all this as prelude, the question naturally arises "what to do?"

The Wages of Sin – What Penalties Are in Play?

While there is a cacophony of international cries calling for retribution, there has yet to be a consensus as to what punishment fits VW's ethical and legal offenses. When it comes to corporate wrongdoing, the U.S. Department of Justice (DOJ) does not have a lengthy resume of consistent enforcement. In fact, there is a conspicuous lack of DOJ criminal enforcement that brought forth a new policy memorandum from then Deputy Attorney General Sally Yates in 2015. (Yates, 2015) She observed the difficulty of individual prosecutions is caused by:

...[S]ubstantial challenges are unique to pursuing individuals for corporate misdeeds. In large corporations, where responsibility can be diffuse and decisions are made at various levels, it can be difficult to determine if someone possessed the knowledge and criminal intent necessary to establish their guilt beyond a reasonable doubt. This is particularly true when determining the culpability of high-level executives, who may be insulated from the day-to-day activity in which the misconduct occurs. As a result, investigators often must reconstruct what happened based on a painstaking review of corporate documents, which can number in the millions, and which may be difficult to collect due to legal restrictions. (Yates, Sep. 9, 2015)

Nevertheless, in view of ever increasing perceived corporate misconduct, this policy memorandum sought to energize the DOJ to seek individual accountability for corporate misconduct. While corporate personhood is defined as legal authority that "allows companies to hold property, enter contracts, and to sue and be sued just like a human being," they cannot go to jail. (Torres-Spellicy, Apr. 17, 2014) Yet legal and ethical decisions are made on a company's behalf by people—employees acting as agents for their employers. They most certainly are eligible for incarceration.

What about their personal liability when it comes to acting on behalf of corporate personhood? Agency law dictates that agents have a fiduciary duty to their principals (companies). (Beatty, Samuelson, 2016) As an agent acting on behalf of their principal company, an employee has liability to third parties. (Torres-Spellicy, 2014) This includes the law.

The DOJ is now aggressively seeking individual civil and criminal accountability for corporate misdeeds by such agents. While a business cannot be sent to prison, how does a business say "they are sorry?" It normally writes checks. It is rare corporate executives ever see the light of prison, but at least a few VW executives are on their way to demonstrate DOJ has had a change of heart. Money is no longer enough of a *mea culpa*. Perhaps, despite its difficulty, this is a viable course of needed action. Criminal prosecution and defense arguably produces a significant emotional event in the most ardent of corporate miscreants. Ask Bernie Madeoff who is enjoying a 150-year prison sentence. (Madeoff, 2018)

Examples

The business world was stunned when pharmaceutical giant Johnson & Johnson found itself in an ethical crisis after seven people died consuming Tylenol capsules that had been mixed with the deadly poison potassium cyanide. (No one was ever identified as the perpetrator.) Following this development, Johnson & Johnson voluntarily pulled all of its Tylenol off its shelves, which amounted to \$100 million worth of product. This happened without government insistence or legal mandate. Johnson & Johnson then proceeded to develop new tamper resistant packaging for 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 assumed accountability for its product and its safe use. (Bhasin, 2011) How does this corporate behavior reflect upon Johnson & Johnson and its corporate ethics?

The most comparable example of an automaker in a similarly devastating scandal to VW was Toyota in 2010. Toyota's problems were safety defects, the worst of which involved a rash of accelerator jams that led to multiple deaths. Toyota was not initially aware of the defects 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. (Bhasin, 2011) Toyota recalled over 10 million cars. (Tuttle, 2015)

In 2014, South Korean automaker 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 carmakers paid a \$100 million civil penalty. Like VW, the penalties concerned allegations that Hyundai and Kia vehicles emitted more pollutants than what the companies had certified with the EPA. They also overstated the vehicles' fuel-economy performances. (Assis, 2015)

Judgment

While there is widespread agreement that VW 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.

VW clearly has a responsibility to repay U.S. consumers for their fraudulently induced purchase and use of the company's vehicles. At this time, VW is offering a full recall and replacement of vehicles to customers, as well as upgrades and cash incentives for customers that remain VW drivers. (Atiyeh, May 5, 2016) Accounting for all expenses, legal and otherwise, VW has initially set aside \$18 billion to cover these anticipated costs. (Bomey, Apr. 21, 2016, p. 4B) This has the potential to be the largest corporate financial apology in decades. Further retribution would greatly exceed historic precedent and give way to claims of mendacity, not public interest. Claims that this would also affect VW's long-term viability could also be raised.

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, the size of the violator's business, the violator's history of compliance with this title, action taken to remedy the violation, and the effect of the penalty on the violator's ability to continue in business" when determining the amount of the civil penalty. (42 U.S.C. § 7524) Each of these factors deserves consideration.

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) VW employees knowingly deceived regulators not only with the introduction of the defeat devices into autos sold in the U.S. starting in 2009 and continuing until their discovery in 2015, but also during the EPA and CARB investigations. (b) Such fraudulent 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." (Michigan, Feb. 1, 2016) On June 28, 2016, DOJ Deputy Attorney General Sally Yates called VW's deception "one of the most flagrant violations" of

"environmental and consumer laws in our country's history." (Randazzo, Spector, June 29, 2016, p. B1-B2) In exchange for the right to do business in the U.S., foreign enterprises are expected to do so lawfully and ethically. When they intentionally seek, to not only cheat in the marketplace, but also 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 that the company engaged in any form of deceit. What does this say about VW's ongoing corporate ethical culture at its highest executive levels? Time to return to our British legislators.

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." (Transport, Oct. 12, 2015, p. 25) [Emphasis added] What does this continued denial reveal about VW's corporate culture? It completely ignores or disregards the public health hazard at a minimum.

VW is a large company, in fact, the largest in Germany. It profited from its unlawful and unethical conduct in the sale of almost 500,000 diesel vehicles in the U.S. and 11 million world-wide. How many diesels would they have sold had the defeat device not been discovered? Would VW have even been allowed to sell its diesels in the U.S. but for the installation of the defeat devices? While any number is speculative, it stands to reason that with reduced fuel mileage caused by emission controls such as smog devices, such cars would be less attractive as many diesel buyers seek fuel economy characteristics. The penalty should reflect the size of the company and profit to curb future behavior, and send a clarion call that such conduct is reprehensible, especially when performed by an industry leader. (EPA, Laws)

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, the DOJ, in its first claim for relief, sought injunctive relief against further sales of diesel vehicles not in conformity with CAA requirements. More importantly, the DOJ sought civil penalties for the sale in the U.S. of approximately 500,000 defeat device vehicles. (U.S. v. Volkswagen, Jan. 1, 2016) 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. (CAA, sec. 204(a) -205(a) (The higher amount came about as a result in an update to the statute.) Since most of the vehicles were sold after Jan. 9, 2009, the total bill is approximately \$18,750,000,000. (Assis 2015) This sum does not include compensation to consumers who purchased these vehicles. To date, VW has agreed to pay \$10.3 billion to the owners of 475,000 affected vehicles with two-liter diesel engines in the U.S., \$2.7 billion to an environmental remediation fund, \$2 billion to promote zero-emission vehicle technology, and \$603 million to 44 states, the District of Columbia, and Puerto Rico to resolve consumer-protection claims. (Randazzo, 2016) On August 25, 2016, VW reported that the two-liter diesel cars, approximately 475,000 of which were sold in the U.S., "can't be retrofitted to fully comply with air-pollution regulations..." (Randazzo, Aug. 26, 2016, B1) VW's attorney, Robert Giuffra, told the U.S. District Court judge hearing the consolidated civil action litigation, "We weren't able to fix the 2-liter cars to the standards to which they were originally

certified." (Randazzo, Aug. 26, 2016, B1) VW still cannot fix the problem it created despite it being well over three years since its confession in September, 2015. These cars remain on the road and continue to emit unlawful noxious emissions—a continuous offense.

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, it is hard to argue the ethical value of fuel economy over the health of children or the elderly, given the public health danger posed by NOx emissions. (Neate, 2015) The Los Angeles Times reported that the affected VW diesel cars emit around 10 to 40 times the NOx allowed per mile. (Mohan, 2015) What impact might this have on the health and medical expenses of Los Angeles residents? The environmental impact is discussed in detail below addressing CO2 and NOx. Knowing that the CAA and EPA regulations have a purpose originating in health concerns, the impact of NOx emissions can be considered important. "Studies cited in the EPA's exhaustive report *Integrated Science Assessment for Oxides of Nitrogen—Health Criteria*, have found a correlation between spikes in nitrogen dioxide levels in city air and emergency room visits by people suffering a heart attack." (Ewing, 2016, p. 160)

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 over the last twenty years by reducing several serious health issues such as congestive heart failure, COPD, bronchitis, and premature death. (Lockwood, 2012) Reasonable minds should agree, this matters. VW's brazen unconcern for public health speaks volumes about the corporate culture and company personhood.

The Size of the Violator's Business

VW is valued at \$126 billion as of May 2015. (Forbes, 2018) As one of the world's largest auto manufacturers, VW is positioned to offer a major economic apology or *mea culpa* to demonstrate the depth and integrity of its regret for its multiple ethical and legal transgressions.

B.4. The violator's history of compliance with this title and action taken to remedy the violation.

VW has been accused of CAA violations before. It has a history of pushing the environmental envelope, but it continues to exhibit the same behavior. When caught, they get out their checkbook and choose to settle. (EPA, Volkswagen of America, June 15, 2005)

B.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 following VW's September 2015 admission 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.

B.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, it is the gravity of the violations together with the totality of other factors that the EPA administrator must consider as an aggravating factor. 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 engage in similarly unethical behavior that America will not only protect its people from such business predators, but also sanction those who dare to exploit their market ambition to the detriment of public health and safety, unlike the European Union.

But what about the U.S. consumers who were duped by VW's eco-green marketing fraud? (Du, Merrill-Sands, Jan. 22, 2016) 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 a combination of car buybacks, lease releases, repairs, and compensation. (Boston, W. St. J., Apr. 14, 2016), B7. The cash compensation to individual owners mentioned earlier is expected to be \$5,000 per person. (Bomey, 2016) These individualized payouts along with 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 established 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. (Baum, et al. 2015)

"Volkswagen cheated its way to the top of the automotive food chain and spared no victim along the way." This quote comes from plaintiffs' documents filed in February 2016 in the U.S. District Court in California as part of proposed class-action suits against VW. (Boston, W. St. J., Feb. 24, 2016). Clearly the class action civil suits seek far more than \$5,000 each for VW's deceived U.S. customers.

In fact, resale values of Volkswagens were already plummeting in the United States, which accounted for about one-fifth of the leasing contracts. Kelly Bluebook, which tracks used car values, estimated that prices for used Volkswagens had by the beginning of 2016 [after September 2015's VW confession] fallen 16 percent, from their prescandal value. (Ewing, 2016, p. 220)

As a consequence of the flood of litigation, and until further notice, VW has suspended the sales of the defeat 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 (Baum, et al. 2015).

Option #3: Market Death.

Recalling that VW's September 2015 confession of wrongdoing was obtained only after the EPA threatened to prohibit the issuance of Certificates of Conformity for 2016 VW diesel vehicles, (Sharman, 2015) it is more likely than not that VW would still be producing diesel vehicles with its defeat device. If character is who you are in the dark when no one is watching, what is VW'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 documents available, including those Volkswagen later filed in its defense, convey the impression that the emissions issue was a technical problem and a regulatory headache, not an occasion for soul-searching. No one inside Volkswagen seemed terribly surprised to learn that company products may have contained a defeat device. No one, as far as is known, saw the revelations as a reason for the company to examine whether the wrongdoing was a system of deeper corporate dysfunction. On the contrary, Volkswagen executives coolly weighed how much they should reveal to regulators. (Ewing, 2016, p. 179)

The DOJ criminally prosecuted accounting firm Arthur Andersen in 2002 for its ENRON related misconduct which signaled its death knell. After all, what business wanted Andersen as their auditor after their criminal conviction? (Clients dropped them like a hot rock, and over 28,000 Andersen employees lost their jobs.) 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. The DOJ elected not to shoot a dead horse. (Johnson, 2015)

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 its vehicles would be substantial. It 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? (Thompson, 2015) Then CEO Müller at the January 2016 Detroit Auto Show continued to espouse the VW groupthink line when asked about the ethical problems at VW by a reporter for National Public Radio.

"It was a technical problem," he said. "An ethical problem? I cannot understand why you say that." Volkswagen had falsely interpreted U.S. law, explained Müller. "And we had some targets for our technical engineers, and they solved this problem and reached targets with some software solutions which haven't been compatible to the American law." Asked about the cover-up in 2014 and 2015, Müller replied, "We didn't lie. We didn't understand the question first. And then we worked since 2014 to solve the problem. And we did it together and it was a default of VW that it needed such a long time." (Ewing, 2016, p. 228)

Given the size of the company, the gravity of its deceitful conduct past and present, and the predatory nature of its management style, does risk of repetition 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. (CAA, sec. 207(c)(1)) 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. (Interview, 2016) 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. (Weisbaum, 2006) Recall from the earlier discussion that NOx has a greater negative environmental impact than CO2. (Sandbach, 2007) 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 defeat devices, then factoring in the emission pollution of 40 X (times) the average car gives us a total environmental impact by VW of approximately \$11.4 billion. (CCD, 2016) 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 VW's 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 willfully deceived anyone. This could be construed as a continuing offense in that VW's management culture and corporate personhood will not permit itself to admit ethical and/or legal error in judgment. (Taylor, 2015) Without a clear admission of guilt and assumption of responsibility for its conduct, VW cannot bring itself to transform its ethical profile. While VW did make several apologies, VW steadfastly denies that any deception or intent to cheat occurred on their part. The question then becomes, "For what then has it ethically apologized?" This is the source of VW's past, present, and potential future problem of appropriate ethical decision-making.

It took until December 10, 2015 for VW Supervisory Board 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 that his sudden realization of this in December 2015 is surprising. (Goodman, 2015) 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 admitted to perhaps, a bit too much: "Our company was dishonest; we screwed up," what does this continue to say about VW's ethical culture? (Westbrook, Sep. 21, 2015) 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, past or present.

Whether 'Tis Nobler to Suffer the Slings of Arrows

Connecting VW's behavior to its groupthink may seem provocative; but perhaps not when considering how dangerous a business of VW's size poses to a nation-state like Germany, not to mention the public health. VW is Germany's largest company. Its management driven groupthink culture continues to present a clear and present danger to ethical business decision-making in the marketplace,

and in regulating for the public health and safety. John Locke prophetically referred to companies like VW when he wrote that tyranny is defined as "the exercise of power beyond right." (Locke, 1690, p. 112) Corporations, like VW, "breach the social contract, exercising 'power beyond right,' when they violate social values, endanger the public, or act illegally." (Steiner, 2016, p. 64)

James Liang, the first VW employee to be criminally prosecuted with conspiracy to defraud the U.S., commit wire fraud, and violate the Clean Air Act, pled guilty in a Detroit courtroom September 9, 2016. (Viswanath, 2016) Liang admitted in court that he knew VW had not disclosed the "defeat devices" to regulators when VW representatives met with them. Agreeing to cooperate and testify for the government against other VW employees, Liang said he and his colleagues "pursued a strategy to disclose as little as possible" intentionally misleading EPA and CARB regulators trying to blame "innocent mechanical and technological problems." (Viswanath, 2016, p. A10) In his plea agreement, Liang revealed that he and his colleagues, "began designing a new engine around 2006" but "soon realized...that the engine could not meet both customer expectations as well as new, stricter U.S. emissions standards." (Viswanath, 2016, p. A10) On August 25, 2017 Liang was sentenced to 40 months imprisonment and a \$200,000 fine for his part in the VW auto emissions scandal. (Roberts, Spector, Aug. 26-27, 2017, p. B2)

A second VW executive, Oliver Schmitt, who served as head of VW's Environment and Engineering Office in Auburn Hills, MI, was arrested in Florida by the FBI just before he was to board a plane back to Germany. Schmidt "was once in charge of ensuring that Volkswagen vehicles complied with U.S. emissions." (Boston, Jan. 10, 2017, p. B1 and B6) The FBI complaint states that Schmidt not only knew of the defeat device and the recent ICCT report that prompted the EPA to open its inquiry, but orchestrated steps to mislead the EPA investigation. (Boston, Jan. 10, 2017, p. B6) The FBI cites an email from Schmidt to his managers acknowledging the problem and posing damage control options: "It should first be decided whether we are honest. If we are not honest, everything stays as it is." (Boston, Jan. 10, 2017, p. B6) What does this say about this VW executive's ethics, and that of his colleagues, especially that of the now indicted former CEO Martin Winterkorn, and his successor recently fired Matthias Müller?

Clearly Liang and Schmidt are not alone in this VW conspiracy, and others like Winterkorn are going to be held criminally liable. "Eight individuals are charged by the U.S. Justice Department probe of Volkswagen's nearly decade-long conspiracy to rig 600,000 diesel-engine vehicles with illegal software that allowed them to cheat on government emissions tests while polluting far beyond legal limits on the road." (Roberts, Spector, Wall St. J., Aug. 26-27, 2017, p. B2) It will be fascinating to see how many are identified in Germany as co-conspirators, and what the German government elects to do, especially given VW's importance in that nation. What will also be intriguing to watch is to what extent VW will go to extricate its U.S. and German executives from criminal prosecution. The U.S. government is making reduced sentencing agreements in exchange for voluntary cooperation in identifying higher managers who knew, participated in, and aided the fraud and attempts to cover-up.

Then Deputy Attorney General Sally Yates through her "all hands on deck" DOJ memo set forth a prosecutorial strategy that will conceivably create a significant emotional event for anyone indicted at VW. This new policy addresses corporate wrongdoing in a coherent way combining criminal and civil government effort. Combined with maximum civil penalties, groupthink may come into question. VW shareholders have already signaled their intense dissatisfaction with executive management. It will be interesting to see how they influence VW's cooperation with DOJ involving further prosecutions. VW is Germany's largest business. As goes VW, so may go groupthink.

As of January 10, 2017, VW "has agreed to pay \$17.5 billion in the U.S. to settle [civil] claims with regulators, consumers, dealers and state attorneys general..." (Ewing, 2016, p. 236) Separate from this, VW has announced that it "expects to plead guilty to criminal charges and pay \$4.3 billion to settle accusations that it rigged more than half a million diesel vehicles with software to cheat emissions standards." (Bonney, Jan. 11, 2017, p. 3B) DOJ would eventually announce a criminal plea deal with VW. What criminal charges did VW plead guilty too? To start, "The charges included conspiracy to defraud the government and violate the Clean Air Act; obstruction of justice; and making false statements in the course of importing goods." (Ewing, 2016, p. 269)

A component of any federal criminal guilty plea is a "Statement of Facts" in which the guilty party essentially makes a written confession. In VW's case, its "Statement of Facts" which it has agreed to, runs thirty pages. "The document confirmed many of the allegations that had been made against the company and its executives. It described the technical impasse in 2006 that led Volkswagen managers to resort to a defeat device..." (Ewing, 2016, p. 269) This criminal admission in view of VW management's ongoing denial of ethical and legal improprieties continues to say something about its deep-seated culture.

The Statement explained how the defeat device was refined over the years to make it more effective. It recounted how Volkswagen executives concocted an elaborate coverup when regulators became suspicious, and how they destroyed evidence once they realized they would be exposed. The statement of facts made it clear that a broad criminal conspiracy was at work. The people involved were high-ranking executives, compliance managers, engineers, software specialists, and in-house lawyers. Volkswagen was portrayed as a place where the people in charge were all too willing to resort to illegal behavior to fulfill the company's ambitions. (Ewing, 2016, p. 269-270)

Business says it is sorry with a check. Given VW's worth, is this a meaningful apology? If it does not hurt in a significant way, it may just go down in Wolfsburg as just another business expense with no lasting effect on VW's corporate ethics.

How does this ethical and legal scandal end for VW? As of September 7, 2018, VW is paying \$27 billion in fines, penalties, and compensation. But this is not the end of the story. One of the largest investment funds in Germany, Deka Investment GmbH, brought suit against VW and its executives that goes to trial September 10. VW management is accused of waiting too long to warn shareholders "of risks to the company's earnings from potential penalties in the aftermath of the U.S. Environmental Protection Agency's complaint." ((Boston, Sep. 7, 2018) When the EPA announced its allegations on September 18, 2015, VW management waited until September 22 to warn shareholders of potential risks to earnings resulting in a 37% loss in share price. How this case goes may affect 1,668 other suits pending against VW seeking \$10.7 billion. ((Boston, Sep. 7, 2018)

CONCLUSION

Based on the evidence presented, VW has earned the most formidable civil penalty a company can receive. Penalty Option 2 discussed earlier is warranted. Given the gravity of the offense, VW needs to serve as an example. The law and ethics in business matter. A message of magnitude needs to be sent to and received by Volkswagen.

In view, however, of VW's continuing offense—denying deception, and failure to recognize and remedy the groupthink ethical culture past and present, all its products should be banned from U.S. markets for five years. Its readmission should be conditioned on its leadership's full and complete public admission of deceptive intent and fraudulent obfuscation of past ethical and legal misconduct. Signing plea agreements is one thing, standing before global media making a public act of contrition is quite another. To whom much is given, much is expected. This penalty will constitute a significant emotional event for VW employees and shareholders. Perhaps its impact will incentivize them to help eradicate the groupthink that not only violates John Stuart Mill's Utilitarian ethics, but constitutes fallacious justification of John Maxwell's reasons why people make unethical choices.

In view of the above discussion and a thirty page Statement of Facts in its DOJ plea agreement deal, the penultimate ethical question remaining is "has VW initiated a change in ethical outlook from groupthink to conducting its business affairs in a manner that restores trust and integrity in VW operations?" In other words, is VW "doing what it ought to do?" As of August 28, 2018, apparently not. While it has been more than three years since the VW scandal became public, an independent compliance monitor was appointed by DOJ to audit VW's efforts to comply with its DOJ plea agreement. Larry Thompson, a former DOJ Deputy Attorney General, serves as that monitor. Recently "Mr. Thompson

criticized the company for being insufficiently transparent citing a 'reluctance to share certain information.' 'Volkswagen', he wrote, 'routinely included the use of redactions' in documents provided to the auditor, with company officials often invoking attorney-client privilege and German privacy laws." (Boston, Aug. 28, 2018, p. B2) Obfuscation and bad faith on VW's part even reaches to its German prosecutorial investigation.

"...German prosecutors have asserted that some company officials were meddling with their investigation." "As recently as May, Audi AG, the luxury car maker owned by Volkswagen, said it had found illegal software that manipulates emissions in about 60,000 of its best-selling diesel-powered vehicles, acknowledging that the car maker continues to struggle to get control of the emissions-cheating scandal. Audi Chief Executive Rupert Stadler was later arrested and is still being detained on suspicion of trying to tamper with witnesses and impede the criminal investigation." (Boston, Sep. 7, 2018, p. B2)

While VW is a large company, it is still affected with a groupthink culture it needs to eradicate from the top down. Despite its confession, it still maintains "... the diesel scandal was carried out by a small group of lower-level engineers without the knowledge of higher executives." (Boston, Sep. 7, 2018, p. B2) It continues to reward bad behavior, as 2015's bonuses of \$74.1 million to its top management (to include its departed CEO Winterkorn) demonstrate in the face of this business scandal. (Boston, Apr. 12, 2016, p. B7) The public, not to mention VW's shareholders, have a right to expect more from VW's leadership. Ethics requires accountability to be intentional. (Maxwell, 2003, p. 51) Within VW's groupthink mind, accountability remains elusive.

ENDNOTES

- 1. 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."
- 2. Ewing, J., 2016. *Faster, Higher, Farther*, 124-125. "Volkswagen did not yet have a system in place that would allow an internal whistle-blower to report the violation without fear of consequences. Employees who had reservations about the illegal software—and there were some—had no place to turn. And top executives were hardly setting an example of moral probity. In the background, the [earlier] prostitution scandal was still making headlines. p. 125.
- 3. Neate, R. *Volkswagen under investigation over illegal software that masks emissions*, The Guardian (Sep. 18, 2015). VW cheated emissions tests in order to market their vehicles as eco-friendly, which truthfully they were not due to the fact 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.
- 4. 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."
- 5. Taylor, M. (2015). *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.

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