

TESTIMONY OF JOHN D. WALKE

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NATURAL RESOURCES DEFENSE COUNCIL

LEGISLATIVE HEARING ON S. 241, S. 1475, S. 2661 AND S. 2736

BEFORE THE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

U.S. SENATE

September 7, 2022

Thank you, Chairman Carper and Ranking Member Capito for the opportunity to testify today. My name is John Walke, and I am clean air director and senior attorney for the Natural Resources Defense Council (NRDC). NRDC is a nonprofit organization of scientists, lawyers, and environmental specialists dedicated to protecting public health and the environment. Founded in 1970, NRDC has more than 3 million members and online activists nationwide, served from offices in New York, Washington, Los Angeles, San Francisco, Chicago, and Beijing.

I have worked at NRDC since 2000. Before that I was a Clean Air Act attorney in the Office of General Counsel for the U.S. Environmental Protection Agency (“EPA”). Prior to that I was an attorney in private practice where I represented corporations, industry trade associations and individuals. Having worked on air pollution issues for the entirety of my career, I believe two of these bills are harmful to U.S. air quality and Americans’ health and welfare. The Committee should not advance S. 2736, the Recognizing the Protection of Motorsports Act of 2021, or S. 1475, the Livestock Regulatory Protection Act of 2021.

The remaining two bills, S. 2421, the Smoke Planning and Research Act of 2021, and S. 2661, the Smoke-Ready Communities Act of 2021, provide important and valuable funding to conduct research on wildfire smoke, community planning to mitigate the impacts of wildfire smoke, and programs to detect, prepare for, and communicate with the public about wildfire smoke. NRDC supports enactment of S. 2421 and S. 2661. I will devote my written testimony to the harmful impacts on air quality, Americans’ health and enforcement of the Clean Air Act that would result from passage of S. 2736 and S. 1475.

I. S. 2736 – The “Recognizing the Protection of Motorsports Act of 2021”

A. Introduction

The most troubling bill before the Committee is one that should not be particularly controversial—at least concerning its primary stated goal. The S. 2736 bill drafters describe it as an effort to “[t]o exclude vehicles to be used solely for competition from certain provisions of the Clean Air Act, and for other purposes.” There appears to be bi-partisan support to assure that

vehicles used solely for organized motorized racing events—whether they are built for racing or modified from on-road vehicles—need not meet the air pollution control requirements under the Clean Air Act that apply to on-road vehicles, so long as those vehicles are de-certified from street use or otherwise reclassified. NRDC and others could support that outcome,¹ with appropriate and modest safeguards to ensure those vehicles are used *solely* for organized motorized racing events, and not on America’s public roads where all motor vehicles must meet air pollution control requirements.

The problem with S. 2736 lies not with the exclusion of “vehicles to be used solely for competition from certain provisions of the Clean Air Act,” but with the four words trailing at the end of that sentence: “and for other purposes.” Nearly all of S. 2736’s content is devoted to opening a damaging loophole in the Clean Air Act, one that would create an “exemption” from the Clean Air Act’s anti-tampering provisions barring manufacture, sale and installation of defeat devices for emissions control systems on motor vehicles. S. 2736 would make it far easier to make, sell and install defeat devices for on-road motor vehicles, and far harder—if not impossible—to enforce the Clean Air Act against illegal defeat device practices by companies that pollute America’s skies and harm Americans’ health.

Many companies have made and marketed for general use after-market “defeat devices,” which effectively turn off vehicle emissions controls. The Environmental Protection Agency and the Department of Justice has been able to enforce against unscrupulous companies that have sold tens of thousands of these devices for motor vehicles driven on America’s roads and highways, even when companies knew or should have known this was the case. In one enforcement case, a supplier acknowledged that it had sold over 85,000 defeat devices that it should have known were being used by on-road vehicle users.² In so doing, their sales led to increased emissions of almost 72,000 tons of nitrogen oxide (“NO_x”) emissions, over 4,200 tons of non-methane hydrocarbons, and 380 tons of particulate matter (“PM”).³ Together, these emissions equate to nearly twice the pollution emitted by Volkswagen from 2008 until the 2015 enforcement action by the United States.⁴ For further context, 72,000 tons of smog-forming NO_x is over *four times* the 17,000 tons of NO_x emissions that EPA’s most recent power plant rule is

¹ See, e.g., Dave Cooke, Senior Vehicles Analyst, Union of Concerned Scientists, “Desperate Tampering Industry Trying to Pass RPM Act to Continue Polluting,” <https://blog.ucsusa.org/dave-cooke/desperate-tampering-industry-trying-to-pass-rpm-act-to-continue-polluting/>.

² Consent Agreement, In the Matter of H&S Performance, LLC, U.S. EPA, Environmental Appeals Board, No. CAA-HQ-2015-MSEB 8248, 8 (Dec. 17, 2015), PG 8 *available at* <https://www.epa.gov/sites/production/files/2016-01/documents/hascafo.pdf>.

³ *Id.*

⁴ Steven R. Barrett, et al., “Impact of the Volkswagen emissions control defeat device on US public health,” *Environmental Research Letters*, Volume 10, Number 11, October 2015, *available at* <http://iopscience.iop.org/article/10.1088/1748-9326/10/11/114005/meta> (estimating VW emissions). For context, the study analyzing the impact of the VW “dieselgate” scandal found that the company’s violations “result[ed] in a total of 59 [] premature deaths, 87% of which are attributable to the PM_{2.5} exposure and 13% to ozone exposure.” *Id.*

projected to reduce from coal-burning power plants in 12 states.⁵ Let me emphasize that these 72,000 tons of unauthorized and dangerous NO_x emissions are happening every year across the United States due to illegal defeat device practices—and this was just from a *single* defeat device legal settlement. There have been many additional EPA legal settlements with defeat device manufacturers since the 2015 settlement.⁶

Enactment of S. 2736 would increase dangerous air pollution nationally to a degree that would dwarf the harmful air pollution and health impacts of Volkswagen’s 2015 “dieselgate” cheating scandal. The legislation would undermine Clean Air Act enforcement initiatives by Republican and Democratic administrations that have found widespread cheating by defeat device sellers, cheating that has worsened hazardous air pollution by many hundreds of thousands of tons annually. EPA data discussed in my testimony shows that defeat devices and noncompliant vehicles on America’s streets and highways already are rampant, and the cause of one of the country’s largest sources of uncontrolled or badly controlled air pollution that causes smog.

EPA enforcement cases against defeat device manufacturers and sellers, discussed in my written testimony, make clear that these bad actors have been hiding behind false and unproven claims that their products modify motor vehicles used solely for motorsport competition. These same defeat device actors now are hiding behind the racing community to promote the RPM Act, when very little of the legislation has anything to do with race car drivers, and almost all of the legislation weakens Clean Air Act prohibitions against tampering and defeat devices involving street vehicles, not racing vehicles.

EPA has never brought a Clean Air Act enforcement case against a racecar driver, and it has no plans to do so.⁷ If this Committee nonetheless concludes that it is necessary to provide even greater assurances to the racing community, it should consider adopting narrow amendments addressing just drivers and their motor vehicles used solely for formal competition, with appropriate and modest safeguards to ensure de-certified vehicles will not be operated on public streets. This Committee should not, however, adopt S. 2736, the RPM Act, or any other

⁵ U.S. EPA, Revised Cross-State Air Pollution Rule Update for the 2008 Ozone NAAQS, 86 Fed. Reg. 23,054 (April, 30, 2021), *available at* <https://www.govinfo.gov/content/pkg/FR-2021-04-30/pdf/2021-05705.pdf>.

EPA projects the following benefits from these 17,000-ton annual NO_x reductions: “The reduction in emissions is estimated to prevent about 290,000 asthma events, 560 hospital and emergency room visits, 110,000 days of missed work and school, and up to 230 premature deaths in 2025. The public health and climate benefits are valued, on average, at up to \$2.8 billion each year over the period 2021 to 2040. These emission reductions will also improve visibility in national and state parks and benefit sensitive ecosystems including Adirondack lakes and Appalachian streams, coastal waters and estuaries, and forests.” U.S. EPA, Fact Sheet, Final Rule: Revised Cross-State Air Pollution Rule Update for the 2008 Ozone NAAQS , *available at*, https://www.epa.gov/sites/default/files/2021-03/documents/revised_csapr_update_factsheet_for_final_rule.pdf, at 4-5.

⁶ *See, infra*, at 11-15.

⁷ *See, infra*, at 7.

Clean Air Act amendments involving tampering and defeat devices on motor vehicles used on public roads, or involving any person that manufactures, sells or installs these parts or components.

B. Background

It is no secret that air pollution from motor vehicles greatly impacts air quality across the United States. Motor vehicles emit NO_x emissions and volatile organic compounds (VOCs) that combine to form smog, as well as deadly fine particle pollution. Transportation produces more than half of the NO_x emissions, almost a third of the VOCs, and over one-fifth of the particulate matter air pollution in the United States. Together, these air pollutants aggravate asthma, cause bronchitis, lung disease, heart attacks, strokes, and even premature death. For example, in 2014, EPA updated air pollution standards for motor vehicles and fuels that will, by 2030, prevent:

- up to 2,000 premature deaths each year;
- 2,200 hospital admissions and asthma-related emergency room visits annually;
- 19,000 asthma exacerbations each year;
- 30,000 upper and lower respiratory symptoms in children each year; and
- 1.4 million lost school days, work days and minor-restricted activities annually.⁸

These standards will continue to reduce on-road emissions of some of the most common and pervasive air pollution nationwide, including NO_x, VOCs, sulfur dioxide (SO₂), carbon monoxide (CO) and known carcinogens, such as benzene and formaldehyde.⁹

Title II of the Clean Air Act regulates mobile sources of air pollution, and requires that, for the sale of a new motor vehicle, the automaker must supply a “certificate of compliance” to show compliance with federal emissions standards like those described above. Section 203 of the Act makes it unlawful to remove, “bypass, defeat, or render inoperative” any part of a motor vehicle’s emissions control system. 42 U.S.C. § 7522(a)(3). S. 2736 would exempt actions enabling modifications to a motor vehicle whose “*purpose*” is for the vehicle “to be used solely for competition.” If that asserted manufacturer or installer purpose is present, emissions control “defeat devices” lawfully may be sold, installed and distributed under the bill for vehicles that are used on-road, even routinely or exclusively, and may or may not also be used for competitions. Such defeat devices shut off a vehicle’s emission control system, and allow it to spew pollution into the air, unrestrained.

By exempting a certain subset of defeat device manufacture, installation and use from the anti-tampering provisions of the Clean Air Act, S. 2736 raises a host of problems with adverse air quality and health consequences. The primary stated purpose of this bill may be to address the concerns of the motor vehicle racing community that uses vehicles for competitive racing exclusively, but an irresponsible and indefensible loophole hides behind this purpose—a major

⁸ U.S. EPA, “U.S. EPA Sets Tier 3 Motor Vehicle and Fuel Standards” (March 2014), *available at* <https://nepis.epa.gov/Exe/ZyPDF.cgi/P100HVZV.PDF?Dockkey=P100HVZV.PDF>.

⁹ *Id.*

loophole for the manufacture, sale and installation of defeat devices that will be used on highways and roads, rather than just on racetracks.

1. 2016 Congressional Research Service testimony.

In 2016 testimony concerning the Senate’s counterpart RPM Act legislation in the House, H.R. 4715, the Congressional Research Service (CRS) described the longstanding Clean Air Act approach, where the:

distinction between a vehicle’s capabilities and its intended use is key to EPA’s position. Going back as far as at least 1974, EPA has maintained that it would make determinations on exclusions from the motor vehicle definition based on *vehicle design, not intended use*. Since that time, EPA has employed that test for a variety of uses, including off-road vehicles, kit cars, vocational vehicles, and imported racing cars.¹⁰

It is exactly this “design versus *intended use*” issue that speaks to the most harmful impacts of this proposed legislation.

2. EPA Letter to Senator Jack Reed

EPA under the Trump administration responded to a December 11, 2019 letter from Senator Jack Reed asking about the Clean Air Act and the conversion of motor vehicles into vehicles used exclusively for competition motorsports. I attach a copy of EPA’s response to Senator Reed following this written testimony.¹¹

The EPA letter is forthright about its “twin goals” concerning these matters: “letting racers race while also keeping tampered, high-polluting vehicles off our streets and highways.” *Id.*, at 1. These are entirely reasonable goals. And those same goals continue under the current administration, based on enforcement steps that are consistent with the prior administration’s actions.¹² The EPA Letter to Senator Reed continues with many important points that are relevant to consideration of S. 2736 and my written testimony:

¹⁰ Congressional Research Service, “Testimony for Hearing on “Racing to Regulate: EPA’s Latest Overreach on Amateur Drivers” (March 2016), *available at* <https://science.house.gov/sites/republicans.science.house.gov/files/documents/HHRG-114-SY21-WState-BYacobucci-20160315.pdf> (emphasis added)

¹¹ See Susan Parker Bodine, U.S. EPA, Assistant Administrator for Enforcement and Compliance Assurance, to Senator Jack Reed (“EPA Letter to Senator Reed”), Appendix A. The EPA response is undated.

¹² Indeed, six days before the Committee’s September 7th hearing, EPA reached an enforcement settlement with yet another seller of aftermarket defeat devices for vehicles used on public streets and highways. See “EPA cracks down on Pa. company for selling auto parts that avoid pollution controls with \$2.5 million penalty” (Sept. 1, 2022), <https://www.epa.gov/newsreleases/epa-cracks-down-pa-company-selling-auto-parts-avoid-pollution-controls-25-million-0>. That same day, EPA announced that a federal court awarded the agency a default judgment of \$10.5 million

a) **The Clean Air Act’s prohibition on tampering and defeat devices for motor vehicles is broad.**

The EPA letter notes that the Clean Air Act “prohibits tampering with these emissions controls, as well as manufacturing, selling, and installing aftermarket parts that defeat those controls (commonly known as aftermarket defeat devices). These prohibitions apply to all devices used to defeat emissions controls installed on EPA-certified motor vehicles, *regardless of how the motor vehicle is used.*” *Id.* (emphasis added)

b) **EPA exercises enforcement discretion not to bring cases against parties that make, sell or install defeat devices on race cars, used exclusively on racetracks.**

The letter goes on to state that “[t]he Act does not contemplate removing emissions controls from an EPA-certified motor vehicle in order to convert it into a competition vehicle that operates only on a race track, not streets and highways. As a matter of enforcement discretion, the EPA is not interested in bringing enforcement actions against persons who manufacture, sell, or install parts that transform a street-legal vehicle into a race car that is operated only on a race track.” *Id.*

c) **Most defeat devices sold are for motor vehicles used on public roads. EPA enforcement cases have addressed more than one million illegal defeat devices installed on street vehicles, not race cars.**

The EPA letter explains that the agency’s “focus is on addressing defeat devices that are installed on street vehicles which, we have found, accounts for *most of the defeat devices sold today.*” *Id.*, at 2 (emphasis added). “In fact, the EPA has found numerous companies and individuals that have manufactured and sold both hardware and software specifically designed to defeat required emissions controls on motor vehicles used on public roads. Our recent enforcement cases have addressed *more than one million such aftermarket defeat devices.*” *Id.* (emphasis added)

against two companies over the illegal manufacture, sale and installation of defeat devices for vehicles used on public roads. *See*, “United States Awarded \$10 Million Default Judgment and Permanent Injunction Against Two Michigan Companies and Their Owner for the Sale of Vehicle Emission ‘Defeat Devices’” (Sept. 1, 2022), <https://www.epa.gov/newsreleases/united-states-awarded-10-million-default-judgment-and-permanent-injunction-against-two>. And two days before that, EPA announced fines against three other companies for installing and/or selling illegal defeat devices for vehicles used on public streets and highways. *See*, “EPA Fines Auto Repair Shops in Iowa, Missouri and Nebraska for ‘Defeat Device’ Violations” (Aug. 30, 2022), <https://www.epa.gov/newsreleases/epa-fines-auto-repair-shops-iowa-missouri-and-nebraska-defeat-device-violations>.

d) EPA has never taken, and does not intend to take, enforcement actions against vehicles owners for converting certified motor vehicles to ones used exclusively for competitive racing.

The EPA Letter to Senator Reed is clear that race car drivers and vehicles used solely for competitive racing are not vehicle conversion concerns under the Clean Air Act for the agency: “[o]ur enforcement focus on aftermarket defeat devices has led some to think that the EPA seeks to stop the tradition of converting EPA-certified motor vehicles to vehicles that are used solely for competition motorsports. *That is not the case.* The EPA *has never taken*, and has no intention to take, enforcement action against vehicle owners for removing or defeating the emission controls of an EPA-certified motor vehicle for the purpose of permanently converting it to a vehicle used solely for competition motorsports.” *Id.* (emphasis added)

e) Defeat device manufacturers and sellers in enforcement cases have been unable to show that *any* of their products were used in competition racing.

The EPA letter addresses the occasional claim by defeat device manufacturers and sellers that their products were meant to be used for competition racing: “In the course of investigating companies concerning their manufacture and sale of parts designed to defeat emissions controls on EPA-certified motor vehicles, these companies sometimes claim that the parts were intended only for competition motorsports. EPA personnel ask such companies to substantiate their claims and, as a matter of enforcement discretion, forego enforcement where the company can provide information showing that the vehicle for which a part or component is manufactured, sold, or installed is in fact used solely for competition motorsports.” *Id.*, at 3. Instead, EPA has “found that many companies that make and sell aftermarket defeat devices claim ‘competition only’ use but *cannot provide any information to show that their products are used in competition motorsports.*” *Id.* (emphasis added)

f) There are many sensible reasons why most aftermarket defeat devices are not used for competitive racing.

Finally, the EPA letter explains why most aftermarket defeat devices are not used for competitive racing—illustrating why over million devices have been addressed in enforcement cases—using a series of examples, ranging from technology to sales methods to sheer volume: “

In many instances, such [“competition only” use claims] are dubious because the parts at issue are for motor vehicles rarely used in competition motorsports (such as diesel trucks) or the parts have features suited for the road rather than the racetrack (such as improved fuel economy). Many companies we investigate operate wholesale or internet-based retail businesses that sell indiscriminately to the public at large. Some utilize point-of-sale disclaimers or require buyers to check a box to acknowledge the part is for “competition only,” but such measures are inadequate for keeping aftermarket defeat devices off vehicles used on public roads. To illustrate this point, recent EPA investigations have revealed evidence showing that *hundreds of thousands of diesel pickup trucks* have had their emissions controls completely removed, and *most or all the aftermarket defeat*

devices used to tamper these trucks were sold under the claim of “competition only.” The sheer volume of aftermarket defeat devices belies the assertion that they are only for competition motorsports.”

Id. (emphasis added) The Trump administration was so concerned about these hundreds of thousands of defeat devices illegally manufactured and sold for diesel pickup trucks and used on public roads, that EPA launched a National Compliance Initiative for 2020-2023, called *Stopping Aftermarket Defeat Devices*. *Id.*, at 2. In November, 2020, the Trump EPA issued a report assessing the preliminary findings of the compliance initiative.

3. November, 2020 EPA review of illegal tampered diesel pickup trucks and aftermarket defeat devices.

In November, 2020, the air enforcement division of the Trump administration EPA issued an important and alarming report entitled, “Tampered Diesel Pickup Trucks: A Review of Aggregated Evidence from EPA Civil Enforcement Investigations.”¹³ The report examined the questions, “how prevalent tampering is, and how much excess air pollution comes from tampered vehicles and engines.” *Id.*, at 1. It sought to gain some insight on those questions by examining “enforcement work concerning tampering and aftermarket defeat devices for diesel pickup trucks.” *Id.* The conclusions are alarming and amount to a national crisis involving the widespread scope of illegal defeat devices on diesel pickup trucks driving on roads and highways today, and the shocking volume of illegal smog (NO_x) and soot (particulate matter) emissions from these vehicles, all across America.

The Trump EPA report estimated that:

the emissions controls have been removed from more than 550,000 diesel pickup trucks in the last decade. As a result of this tampering, more than 570,000 tons of excess oxides of nitrogen (NO_x) and 5,000 tons of particulate matter (PM) will be emitted by these tampered trucks over the lifetime of the vehicles. These tampered trucks constitute approximately 15 percent of the national population of diesel trucks that were originally certified with emissions controls. But, due to their severe excess NO_x emissions, these trucks have an air quality impact equivalent to adding more than 9 million additional (compliant, non-tampered) diesel pickup trucks to our roads.”

Id., at Enclosure, 1 (emphases added). To place 570,000 tons of illegal, excess NO_x emissions from just tampered diesel pickup trucks in perspective, *all* electric power plants in the United States released 780,000 tons of NO_x emissions in 2021.¹⁴

¹³ <https://www.epa.gov/sites/default/files/2021-01/documents/epaedletterreportontampereddieselpickups.pdf> (“EPA Defeat Device Report”).

¹⁴ U.S. EPA, Clean Air Market Division, Annual Nitrogen Oxides From U.S. Power Plants, 1990-2021, <https://www.epa.gov/airmarkets/power-plant-emission-trends>.



(Photo: Dave Cooke, Senior Vehicles Analyst, Union of Concerned Scientists, “The RPM Act: How a Multi-billion Dollar Industry is Trying to Ruin Our Air” (Sept. 17, 2020), <https://blog.ucsusa.org/dave-cooke/the-rpm-act-how-a-multi-billion-dollar-industry-is-trying-to-ruin-our-air/>.)

The EPA Defeat Device Report attributes this widespread cheating, illegal tampering and defeat devices, and excess air pollution to “numerous companies and individuals that have manufactured, sold, and installed both hardware and software specifically designed to defeat required emissions controls on motor vehicles.”¹⁵ The more than 550,000 illegally tampered pickup trucks and the more than 570,000 tons of resulting excess NO_x emissions were “based on 45 different delete tuning product lines manufactured by 28 different companies.” *Id.*, at 13. “Invoices showed sales of delete parts in all 50 states and approximately 83 percent of counties in the United States.” *Id.*

The Report explains that “air pollution from a diesel pickup truck increases drastically (tens or hundreds of times, depending on the pollutant) when its emissions controls are

¹⁵ *Supra*, note 12, at Enclosure, 3.

removed.” *Id.*, at 3-4. But, “[e]ven when the filters and catalysts remain in the vehicle’s exhaust system, EPA testing has shown that simply using a tuner to recalibrate the engine can *triple* emissions of NO_x.” *Id.*, at 4 (emphasis added). The Report found that approximately half of the illegal tampering occurred when vehicles were three years old or less, *id.*, meaning these illegal excess emissions will persist for nearly the entire lifetime of the vehicles being driven on roads and highways.

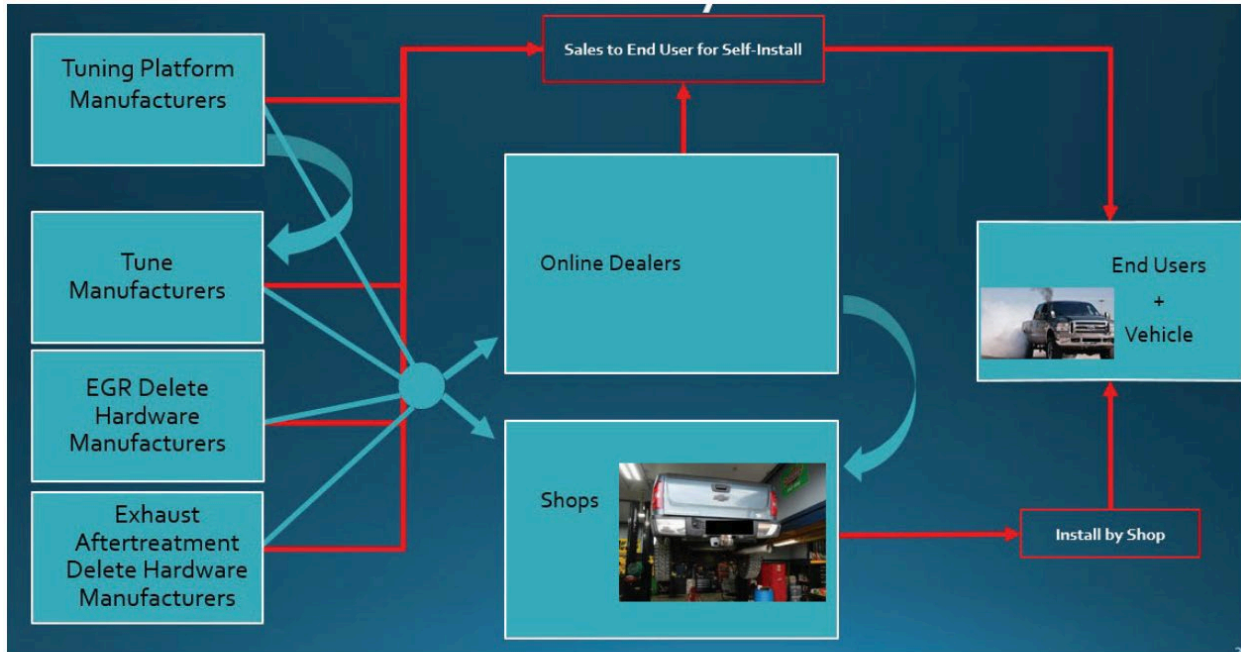


Figure 2. Overview of the Defeat Device Industry

(Source: EPA Defeat Device Report, *id.*, at 5.)

I include as an Appendix to my testimony, for ease of reference, a table from the EPA Defeat Device Report with state-by-state data on the estimated numbers of diesel pickup trucks subject to illegal tampering and defeat devices (called “deleted vehicles”); the estimated percentage that these vehicles represented out of the total truck fleet in 2016, for model year 2003 trucks and older; and the estimated excess NO_x and particulate matter emissions. Appendix A. I excerpt some of that data for numerous states here, including all states represented by Committee members:

Observed Class 2b and 3 (Diesel Pickup Trucks) Tampering from 2009 through 2019

State	Estimated Deleted Vehicles	Estimated Deleted Vehicle, % of Total 2016 Fleet, 2003+ Model Year Only	Estimated Excess NO _x (tons)
Alabama	11,962	19.0%	12,240
Alaska	3,783	18.0%	3,870
Arizona	11,478	12.7%	11,744
Arkansas	5,840	11.6%	5,976

California	8,859	2.7%	9,065
Delaware	924	12.1%	945
Florida	24,619	15.1%	25,191
Illinois	18,245	19.1%	18,669
Iowa	8,798	15.8%	9,002
Massachusetts	3,859	11.5%	3,949
Michigan	18,382	21.0%	18,809
Mississippi	6,447	15.5%	6,596
North Carolina	13,810	14.9%	14,130
North Dakota	7,901	25.6%	8,085
Ohio	19,459	20.3%	19,911
Pennsylvania	18,146	16.4%	18,567
Oklahoma	15,252	14.7%	15,607
Oregon	17,436	20.4%	17,841
Rhode Island	626	12.0%	641
South Carolina	7,477	16.9%	7,651
Texas	64,758	11.9%	66,262
Vermont	1,718	19.1%	1,758
Washington	23,646	21.9%	24,195
West Virginia	5,336	20.2%	5,460
Wyoming	8,619	20.0%	8,819
All 50 State Totals	557,478	14.72%	570,423

(Source: EPA Defeat Device Report, *id.*, at 16-17.)

4. Clean Air Act Enforcement Cases Involving Illegal Defeat Devices

This level of widespread lawbreaking and the alarming increases in dangerous air pollution led the Trump administration to launch a National Compliance Initiative, entitled, “*Stopping Aftermarket Defeat Devices for Vehicles and Engines.*” *Id.*, at 5. The Compliance Initiative “focuses on stopping the manufacture, sale, and installation of defeat devices on vehicles and engines used on public roads as well as on nonroad vehicles and engines.”¹⁶

EPA reported that just in FY2021 the Initiative resolved a remarkable *forty* civil enforcement cases—the “greatest number of resolutions for tampering and aftermarket defeat devices for any one year in the agency’s history—thereby stopping the manufacture or sale of devices intended to defeat required emissions controls on vehicles and engines used on public roads.”¹⁷ *Id.* EPA highlights several of these enforcement settlements on its website, along with legal complaints, consent decrees, and summaries of the violations, air pollution impacts, civil penalties, and health effects and environmental benefits from the settlements:

¹⁶ U.S. EPA, National Compliance Initiative: Stopping Aftermarket Defeat Devices for Vehicles and Engines, <https://www.epa.gov/enforcement/national-compliance-initiative-stopping-aftermarket-defeat-devices-vehicles-and-engines>.

¹⁷ *Id.*

1. **Xtreme Diesel Performance, LLC, Clean Air Act Settlement:** this September, 2021 settlement “resolve[d] alleged violations of the Clean Air Act (CAA) associated with the manufacture, sale, and/or offer to sell aftermarket products that defeat the emissions control systems equipped on diesel pickup trucks.”¹⁸ “XDP manufactured, sold, and/or offered to sell at least 27,000 aftermarket defeat devices designed for diesel pickup trucks between January 1, 2015, and May 31, 2017.” *Id.* “XDP’s defeat devices enabled the removal of the [exhaust gas recirculation] EGR systems, filters, catalysts, and other emissions control systems that are necessary to treat air pollution formed in the engine before it is emitted into the ambient air.” “XDP also marketed and sold other EGR delete kits, empty exhaust pipes (a.k.a., “straight pipes”), and electronic tuning devices (“tuners”) that disable filters, catalysts, EGR systems, and other critical emissions control devices equipped on diesel pickup trucks.” *Id.*

“EPA estimates that this settlement will prevent the future sale of approximately 11,000 illegal products per year. EPA further estimates that the products XDP sold between January 2015 and May 2017 may result in more than 12 million pounds of excess NO_x emissions and 115,000 pounds of excess PM emissions over the anticipated remaining life of the diesel pickup trucks equipped with XDP’s defeat devices. This enforcement action will prevent additional excess emissions that would have resulted from the continued sale of these illegal products.” *Id.*

2. **Gear Box Z, Inc., Clean Air Act Settlement:** this August, 2021 settlement also “resolve[d] alleged violations of the Clean Air Act (CAA) associated with the manufacture, sale, and/or offer to sell aftermarket products that defeat the emissions control systems equipped on diesel pickup trucks.”¹⁹ “GBZ manufactured, sold, and/or offered to sell at least 8,300 aftermarket defeat devices designed for diesel pickup trucks. GBZ sold thousands more until the court prohibited GBZ from continuing to sell its products in March 2021. The products GBZ manufactured and sold include electronic tuning devices (“tuners”) that disable filters, catalysts, exhaust gas recirculation (EGR) systems, and other critical emissions control devices or alter engine performance. GBZ also manufactured and sold hardware products designed to disable or bypass EGR systems equipped on diesel pickup trucks and marketed and sold empty exhaust pipes (a.k.a., “straight pipes”) that enable removal of emissions controls.” *Id.*

“EPA estimates that this settlement will prevent the future sale of approximately 3,600 illegal products per year. EPA further estimates that the products GBZ sold between January 2015 and April 2017 may result in more than 7.5 million pounds of excess NO_x emissions and 170,000 pounds of excess PM emissions over the anticipated remaining life of the diesel pickup trucks equipped with GBZ’s defeat devices. This enforcement action will prevent additional excess emissions that would have resulted from the continued sale of these illegal products.” *Id.*

¹⁸ <https://www.epa.gov/enforcement/xtreme-diesel-performance-llc-clean-air-act-settlement>.

¹⁹ <https://www.epa.gov/enforcement/gear-box-z-inc-clean-air-act-settlement>.

3. **Advanced Flow Engineering, Inc., Clean Air Act Settlement:** this July, 2021 settlement also “resolve[d] alleged violations of the Clean Air Act (CAA) associated with the manufacture, sale and/or offer to sell aftermarket products that defeat the emissions control systems of motor vehicles.”²⁰ “aFe manufactured, sold, and/or offered to sell at least 63,000 aftermarket defeat devices between 2014 and 2021. These products were for diesel and gas engines. All of the products were hardware exhaust system products -- sold individually or included in kits -- that physically alter or remove filters, catalysts and other critical emissions control devices that reduce air pollution.” *Id.*

“EPA estimates that this settlement will prevent the future sale of approximately 12,000 illegal product units per year. On an annual basis, EPA projects this would result in the prevention of 830 tons of NO_x, 8 tons of PM, 41 tons of non-methane hydrocarbons, and 263 tons of CO.”

EPA pursued these enforcement cases, and takes Clean Air Act violations by defeat device manufacture, sale and installation so seriously, because “testing demonstrates that vehicles equipped with emission control defeat devices can produce significantly more emissions than compliant vehicles.”²¹ EPA understands that “[r]emoving emission controls from vehicles presents a threat to public health. Increased emissions are linked to:

- Premature death in people with heart or lung disease
- Nonfatal heart attacks
- Irregular heartbeat
- Aggravated asthma
- Decreased lung function
- Increased respiratory symptoms, such as irritation of the airways, coughing or difficulty breathing.

Id. Due to its serious concerns with aftermarket defeat device and tampering violations, EPA even has taken the unusual step of issuing a rare Enforcement Alert.²² The Agency explained that the December, 2020 Alert:

is intended to remind all regulated entities that installing a defeat device or tampering with a motor vehicle or non-road equipment can be costly to their businesses and can subject them to enforcement and penalties. The U.S. Environmental Protection Agency (EPA) remains concerned that regulated entities are continuing to ignore the prohibitions against tampering in section 203(a)(3) the Clean Air Act and 40 C.F.R. §§ 1068.101(b), despite the EPA resolving *over seventy cases in the last five years.*

²⁰ <https://www.epa.gov/enforcement/advanced-flow-engineering-inc-clean-air-act-settlement>.

²¹ U.S. EPA, Fact Sheet, Clean Air Act Vehicle Aftermarket Defeat Devices and Tampering (March 2020), <https://www.epa.gov/system/files/documents/2021-11/epafactsheetreaftermarketddsandtampering.pdf>.

²² <https://www.epa.gov/sites/default/files/2020-12/documents/tamperinganddefeatdevices-enfalert.pdf>.

Id. (emphasis added). The Alert further noted that the EPA National Compliance Initiative’s focus is “on those who manufacture, sell, or install aftermarket parts known as defeat devices, which bypass or render inoperative required emissions control systems, resulting in significant increases in harmful air emissions.” *Id.*

5. Court ruling rejects defeat device seller’s arguments due to zero evidence its products had been used for motor sports, and because seller knew of street use.

One defeat device enforcement case is illustrative, and helpful because it produced a federal court decision. The EPA sent a Notice of Violation in December, 2017 to Gear Box Z, Inc., an Arizona corporation, “for selling products that, when installed, circumvent or delete an engine's emissions controls, violating the Clean Air Act ("CAA"), 42 U.S.C. § 7522(a)(3)(B).”²³ The Specialty Equipment Market Association ("SEMA") filed an Amicus Curiae brief, supporting certain legal positions of Gear Box Z, Inc. *Id.* at 524, 528.

After receiving the Notice of Violation, Gear Box Z, Inc. “continued to produce and sell its products,” *id.*, at 525, so the United States filed a lawsuit in January 2020, alleging that “Defendant sold 8,323 products that the EPA considers to be defeat device.” *Id.*, n.1. The U.S. filed a Motion for Preliminary Injunction in August, 2020 to halt the manufacture and sale of certain Gear Box products, which resulted in the court decision discussed here. *Id.*, at 525.

The federal judge found that the “United States provide[d] extensive evidence as to the functionality of Defendant's products and their capability to act as defeat devices, and Defendant [did] not explicitly address or refute that evidence.” *Id.*, 526. Instead, Defendant argued, among other things (all rejected by the judge), that its products were covered by “an exclusion for the use of defeat devices in motor sports or competition vehicles...” *Id.*, at 527-28. Defendant and *amicus*, SEMA, argued that such an exclusion from the Clean Air Act existed, while the United States strongly disagreed.²⁴ The federal judge concluded, however, that this question was “entirely hypothetical” and “moot,” because Defendant and SEMA had provided absolutely no “evidence that there is a motor sports use for Defendant’s products”:

But Defendant has not produced a single piece of evidence that a single one of its products has been used on a motor sports vehicle (or an emergency or military vehicle,

²³ *United States v. Gear Box, Inc.*, No. CV-20-08003-PCT-JJT, 526 F. Supp. 3d 522 (D. Ariz. 2021) (“*Gear Box Ruling*”), available at <https://casetext.com/case/united-states-v-gear-box-z-inc>.

²⁴ *Id.*, at 528. EPA even went so far as to address and reject *amicus* SEMA’s arguments on its enforcement webpage: “The court also addressed an *amicus curiae* brief, filed on behalf of a trade association, which argued that the [Clean Air Act’s] prohibition on defeat devices does not apply to motor vehicles used for racing or competition purposes. The United States filed a response arguing that there is no competition motorsports “exclusion” in the [Clean Air Act’s] definition of “motor vehicle,” nor is there any “exemption” from the [Clean Air Act’s] defeat device prohibition for parts used on vehicles used in competition motorsports.” <https://www.epa.gov/enforcement/gear-box-z-inc-clean-air-act-settlement>.

for that matter). By contrast, the United States has produced ample evidence, as was its burden, that Defendant's products are used in motor vehicles as contemplated by the [Clean Air Act]. (*See, e.g.*, U.S. Resp. to Amicus Br. at 5–9.)

Id., at 528.

The judge also addressed Defendant’s argument about the degree of legal knowledge required, and its suggestion that “the United States cannot show that Defendant ‘knows or should know’ that its products are ‘being offered for sale or installed’ as defeat devices, as required by the [Clean Air Act], 42 U.S.C. § 7522(a)(3)(B), because Defendant does not know what its customers do with its products.” *Id.* The judge had no problem dismissing this argument:

Defendant's suggestion is belied by its own statements in response to customer questions on its website and on social media platforms. Defendant's own product manuals and advertisements also demonstrate that Defendant knows its products are installed as defeat devices. (*E.g.*, Doc. 37-3, Jorquera Decl. ¶¶ 49–52.) Defendant cannot claim a lack of knowledge simply by not keeping sales records, and the evidence clearly shows that Defendant knows the purpose of its products is for use as defeat devices.

Id.

6. Specialty Equipment Market Association Market Report for 2022

The Specialty Equipment Market Association (“SEMA”) is a trade association and lobbying organization whose member companies “make, buy, sell and use all kinds of specialty parts and accessories” for cars and trucks.²⁵ SEMA has published a report entitled, “SEMA Market Report 2022: A Comprehensive Overview of the Automotive Specialty-Equipment Market.” I attach this full report to my testimony. The SEMA Market Report attests to a market size for its members’ products of “over \$50 billion. Overall consumer spending on parts and accessories jumped 6.3% last year. This new high point for industry sales reached \$50.9 billion.” SEMA Market Report, at 1. The Report refers generally to consumers that modify their cars and trucks as “accessorizers.” The Report notes that “[m]ost accessorized vehicles today are still daily drivers and are often used for commuting, running errands and cruising.” *Id.*, at 63.

In a table drawing on 2021 SEMA U.S. Market Data, the Report summarizes how its consumers use accessorized vehicles, as a percentage of accessorizers’ vehicles:

²⁵ About SEMA, [https://www.sema.org/about-sema?_utma=95790915.472322210.1662148713.1662148717.1662148717.1&_utmb=95790915.0.10.1662148717&_utmc=95790915&_utmx=-&_utmz=95790915.1662148717.1.1.utmcsr=google|utmccn=\(organic\)|utmcmd=organic|utmctr=\(not%20provided\)&_utmv=-&_utmh=59063141](https://www.sema.org/about-sema?_utma=95790915.472322210.1662148713.1662148717.1662148717.1&_utmb=95790915.0.10.1662148717&_utmc=95790915&_utmx=-&_utmz=95790915.1662148717.1.1.utmcsr=google|utmccn=(organic)|utmcmd=organic|utmctr=(not%20provided)&_utmv=-&_utmh=59063141).

	TOTAL VEHICLES	SMALL CAR	MIDSIZE / LARGE CAR	SPORTS CAR	ALTERNATIVE POWER	CUV	SUV	PICKUP	VAN	CLASSIC
Running Errands	71%	73%	76%	55%	68%	79%	72%	70%	77%	33%
Pleasure Driving	66%	66%	65%	80%	69%	69%	68%	62%	59%	64%
Commuting	61%	68%	68%	47%	72%	73%	60%	56%	61%	14%
Work Use	46%	49%	49%	27%	52%	45%	43%	52%	47%	18%
Off-Road	16%	4%	3%	4%	11%	10%	33%	27%	6%	17%
Collector Vehicle	5%	3%	4%	24%	7%	2%	2%	3%	1%	47%
Car Shows	5%	4%	5%	23%	8%	1%	2%	2%	<1%	35%
Track Days	3%	4%	3%	16%	9%	2%	2%	3%	2%	1%
Dedicated Racing Vehicle	2%	2%	2%	9%	6%	1%	1%	1%	<1%	2%
Non-Operational	1%	1%	1%	1%	1%	<1%	1%	1%	<1%	11%

(Source: 2022 SEMA Market Report, Appendix B, at 63.)

The table reveals that the activity of “Dedicated Racing Vehicle” makes up a mere 2% of total accessorized vehicle use. The vast majority of activities take place on U.S. roads and highways, not competitive racetracks: “Running Errands” makes up 71% of total accessorized vehicle use, “Pleasure Driving” makes up 66%, “Commuting,” 61%, and “Work Use,” 46%. *Id.*

The SEMA Market Report reveals further that the “Sports Car” vehicle segment for member company products represents just 4% of the share of total sales dollars, while pickup trucks represent 27%, and small/midsize/large cars represent 33%. SEMA Market Report, at 9. The Report explains that “many” sports cars “are used for everyday use, but also kept as collector cars or for racing and track use as well.” *Id.*, at 63. The table above also provides estimates for activities in the “Sports Car” vehicle segment: 80% use for “Pleasure Driving,” 55% for “Running Errands,” 47% for “Commuting,” and 27% for “Work Use.” *Id.* (Table, column 5). Only 9% of estimated sports car vehicle activity is for use as a “Dedicated Racing Vehicle.” *Id.* And to reiterate, the Report discloses that the activity of “Dedicated Racing Vehicle” makes up a mere 2% of total accessorized vehicle use for all vehicle segments. *Id.*, at 63.

Aftermarket accessories have the potential to adversely affect vehicle emissions in a variety of ways. The SEMA Market Report includes sales figures for a category of “Performance Products,” which represented \$12.23 billion of the industry’s \$50.9 billion in total market segment sales, or 24%, in 2022. Appendix B, at 8. The Performance Products category includes subcategories for Engine Control and Computer Products (e.g., tuning systems), Air Intake and Exhaust Products (e.g., diesel delete kits), and Forced Induction Systems (i.e., turbochargers and superchargers) that in turn would include aftermarket parts and components that could facilitate tampering with vehicle emissions systems. These subcategories within the Performance Products category were responsible for \$3.79 billion in total sales in 2022. *Id.* Products in the Ignition, Internal Engine, and Carburetor and Fuel System Products categories also have the potential to adversely affect emissions if not substantially similar to the original manufactured part. These

subcategories within the Performance Products category were responsible for an additional \$3.11 billion in total sales in 2022. *Id.*

Not all accessory products, of course, constitute aftermarket defeat devices that facilitate tampering with the emissions systems of motor vehicles. Within the Performance Products category, for example, there is a subcategory for safety gear, like roll cages and other safety products, whose 2021 sales were \$0.38 billion, or 0.7% of total sales. *Id.* Equally, there are products within the subcategories listed above that will not have the potential to adversely affect emissions or otherwise tamper with vehicle emissions systems. The Market Report does not break out or otherwise indicate what portion of the identified sales were for aftermarket parts or components with the potential to adversely affect emissions in vehicles used on roads or highways.²⁶

II. S. 2736, the RPM Act, Weakens the Clean Air Act’s Longstanding Prohibition on Tampering and Manufacture, Sale and Installation of Defeat Devices on Motor Vehicles.

A. The Clean Air Act prohibits tampering with emissions controls & aftermarket defeat devices on motor vehicles.

As EPA explained in its letter to Senator Reed, “the [Clean Air Act] prohibits tampering with [motor vehicle] emissions controls, as well as manufacturing, selling, and installing aftermarket parts that defeat those controls (commonly known as aftermarket defeat devices). These prohibitions apply to all devices used to defeat emissions controls installed on EPA-certified motor vehicles, regardless of how the motor vehicle is used.”²⁷ The relevant legal intent

²⁶ According to one industry expert writing in *Engine Builder* magazine, aftermarket parts and components with the potential to increase emissions include: ‘aftermarket electronic fuel injection systems, air cleaners, camshafts, carburetors, coils and ignition wires; computer chips, distributors, electronic control units, computer programming devices or in-line controllers/modules, electronic ignitions, fuel injection, cylinder heads, headers (in some cases, exhaust manifold components including air injectors, heat shields for the thermostatic air cleaner, heat risers, EGR system hookups and fuel evaporation systems, intake manifolds, nitrous oxide systems, and superchargers or turbochargers.’ Doug Kaufman, “EPA and the Engine Builder,” *Engine Builder* (May 21, 2018) (passage quoted, but original used a bulleted format), <https://www.enginebuildermag.com/2018/05/epa-and-the-engine-builder/>. “Other internal engine parts such as pistons, rods, or the crank must be built to factory specifications. Oversize parts can be used as long as they are within factory tolerances for replacement engine parts. Any part not built within factory specifications requires an Executive Order [from the California Air Resources Board] to be legal for street use.” *Id.*

²⁷ EPA Letter to Senator Reed, at 2. The Clean Air Act’s prohibitions against tampering and aftermarket defeat devices appear in section 203(a)(3) of the Act, 42 U.S.C. § 7522(a)(3):
Tampering: CAA § 203(a)(3)(A), 42 U.S.C. § 7522(a)(3)(A), 40 C.F.R. § 1068.101(b)(1): [The following acts and the causing thereof are prohibited] for any person to remove 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

standard for unlawful aftermarket defeat devices is whether “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.” *Id.*, at CAA § 203(a)(3)(B).

In assessing whether a defeat device manufacturer, seller or installer “knows or should know” aftermarket parts are sold or installed to defeat compliant emissions systems on motor vehicles, EPA has said “[n]o particular information is in and of itself conclusive. When exercising enforcement discretion, the EPA considers the totality of the circumstances, including the attributes of the aftermarket parts and overall volume of sales.”²⁸ EPA and at least one federal court have identified factors contributing to findings that a party did know or should have known defeat devices were offered for sale or installed, including: where a party could not provide *any* information to show products were used in competition motorsports; where a party operated wholesale businesses or websites that sell to the general public; where a party used mere disclaimers or asked buyers to check boxes claiming parts are for motorsport ‘competition only’ purposes;²⁹ where a party did not know what its customers do with its products; where a party’s own product manuals and ads indicated such knowledge; and where a party failed to keep sales records.³⁰

As the Congressional Research Service (CRS) noted in testimony at a hearing for the counterpart House bill to then-S.203, “[g]oing back as far as at least 1974, EPA has maintained that it would make determinations on exclusions from the motor vehicle definition based on vehicle design, *not intended use*.”³¹ Neither CRS nor I have identified any previous Department of Justice enforcement cases against defeat device manufacturers where the government was compelled to disprove, or overcome manufacturer claims, that the *intent or purpose* of the sale was for use solely for competition. Moreover, “CRS could identify no instances where enforcement actions were taken against parts suppliers who were operating *solely* in the racing parts market.”³²

prior to its sale and delivery to the ultimate purchaser, or for any person knowingly to remove or render inoperative an1 such device or element of design after such sale and delivery to the ultimate purchaser;"

Aftermarket Defeat Devices: CAA § 203(a)(3)(B), 42 U.S.C. § 7522(a)(3)(B), 40 C.F.R. § 1068. 101(b)(2): “[The following acts and the causing thereof are prohibited] for 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;"

²⁸ EPA Letter to Senator Reed, at 3.

²⁹ *Id.*

³⁰ *Gear Box Ruling*, 526 F. Supp. at 528.

³¹ CRS Testimony, *supra* n.10 (emphasis added).

³² *Id.* (emphasis added)

B. The RPM Act would weaken the Clean Air Act prohibitions on tampering with emissions controls & aftermarket defeat devices on motor vehicles.

The RPM Act would weaken the prohibitions on tampering and aftermarket defeat devices by adopting a forthright “exemption from anti-tampering provisions” for any person, including defeat device manufacturers, sellers and installers. S. 2736, Sec. 3. The bill creates these exemptions from the Clean Air Act’s prohibitions “if the action is for the purpose of modifying a motor vehicle into a vehicle to be used solely for competition and that vehicle is not authorized for operation on a street or highway.” *Id.*, Sec. 3(a). It is immediately obvious that the exemption extends far beyond competition motorsport racers, because the section of the Act being amended, section 203(a), applies to “any person,” as well as “a manufacturer.” 42 U.S. Code § 7522.

By creating an outright exemption, founded on a lax legal intent standard (“for the purpose of”), S. 2736 would make it far easier to manufacture, sell and install defeat devices for on-road motor vehicles, and far harder—if not impossible—to enforce the Clean Air Act against illegal defeat device practices by companies that pollute America’s skies and harm Americans’ health. Companies that sell defeat devices to the general public, devices installed on vehicles that will be used on public roads, will seek refuge in S. 2736’s exemption. These lawbreakers will argue it was their “purpose” to make, sell or install products to be used solely for motorsport competition—even when they know, should have known, or act in willful disregard of whether defeat devices are being used on public roads. The exemption and lax legal standard represent an extreme weakening of the standard the Department of Justice has used to hold defeat device companies liable for selling illegal defeat devices with awareness and abuses that may or may not rise all the way to the level of purposeful intent. No defendant in a civil enforcement case will admit it was their purpose to commit prohibited acts, for street vehicles, making the “for the purpose” standard effectively meaningless.

C. The S. 2736 requirement for more than “unsupported declarations” from buyers does not cure the harms caused by its exemption.

S. 2736 includes a requirement directing the EPA Administrator to adopt a regulation that shall, among other things, “provide that a manufacturer, seller, or installer of a part or component seeking to use the exemption under the amendment made by section 3(a) may not rely *solely on unsupported declarations from the purchaser or owner of a vehicle* about — the legal status of the vehicle, or the intended use of—the part or component; or the vehicle.” S. 2736, Sec. 4(b)(3) (emphasis added). Such regulation further shall “provide that evidence of physical attributes of a vehicle to be used solely for competition *may be sufficient to qualify for the exemption* under the amendment made by section 3(a).” *Id.* (emphasis added)

The first thing to observe about these provisions is that until EPA issues such a regulation, which often takes several years, defeat device manufacturers, sellers and installer *may* rely on “unsupported declarations.” Accepting for the sake of argument this is not the drafters’ intent, the bill still fails to cure the harms arising from the creation of the exemption in section 3(a). These two regulatory provisions prove far too much—and far too little.

Wholesalers and Internet-based retailers internationally, or anywhere in the U.S., may sell illegal defeat devices and take advantage of the RPM Act exemption, after a consumer uploads a photo with “evidence of physical attributes of a vehicle to be used solely for competition.” Any photo, any vehicle, belonging to anybody, cut-and-pasted from the Internet, and the illegal defeat device maker or seller hundreds or thousands of miles away breaks the law and gets away with it. The “unsupported declaration” safeguard is no better, since defeat device makers, sellers and installers *may* rely on “unsupported declaration”; they just may not rely “solely” on them. *Id.*, Sec. 4(b)(3). Notably, the legislation does not require *any* documentation from the relevant state or local motor vehicle department that the vehicle is not authorized for use on public roads and highways. Time and “creative” compliance will multiply the ways that bad actors take advantage of the RPM Act exemption, while *not* complying with the Clean Air Act’s prohibitions on tampering and defeat devices involving street cars.

It is easy to forecast that actors with unlawful behavior similar to the defendants addressed in the EPA National Compliance Initiative, the EPA Letter to Senator Reed and the Gear Box Ruling will quickly learn how to take advantage of the new exemption in the RPM Act. They will continue to make and sell illegal defeat devices that end up on America’s public roads, but now the RPM Act will make it even easier for them to do so. Indeed, the RPM Act makes it much easier for bad actors to *increase* the manufacture and sale of illegal defeat devices that will be used on streets and highways, not on competitive racetracks. The problem of 550,000 noncompliant diesel pickup trucks on public roads will only worsen; the 570,000+ tons of excess NO_x emissions from noncompliant diesel pickups will increase, and grow from other motor vehicle sectors, as well. If Committee members question any of this, officials with the U.S. EPA, U.S. Department of Justice, and California Air Resources Board should be consulted to solicit their expert views, based on experiences with defeat device enforcement cases.

D. The S. 2736 prohibition on databases, consultation of vehicle registration, or registration obstructs accountability, implementation, and enforcement against defeat device noncompliance.

S. 2736 serves the interests of defeat device manufacturers and sellers rather than racing enthusiasts and the American people most starkly, by enacting a prohibition on the EPA Administrator adopting accountability mechanisms to ensure defeat devices are used exclusively for competitive racing, rather than on public streets and highways. Section 3(b) of the bill bars the EPA Administrator from:

(1) creat[ing] a Federal database, or identif[ing] or requir[ing] the creation of a State database, of vehicle registration information that is required to be consulted at the point of manufacture, sale, installation, or use of parts or components; and

(2) requir[ing] the registration of a vehicle or a part or component of a vehicle by the manufacturer, seller, purchaser, installer, or user of the vehicle.

This affirmative, remarkable prohibition on information-gathering would prohibit EPA from requiring defeat device manufacturers and sellers to consult state records with Vehicle Identification Numbers, to determine whether motor vehicles claimed by potential customers to

be “competition-only” have been de-certified, or whether they remain registered for street use. This provision, as much as the lax “purpose” standard, indicates how much the legislation promotes the interests of defeat device manufacturers and sellers over accountability, compliance with the Clean Air Act, and the public’s health and air quality. Notably, this clear obstruction of accountability and enforcement did not appear in the RPM Act of 2016, when the legislation first was introduced.³³

III. Prior Congressional Testimony Supporting the RPM Act

In a 2017 Senate legislative hearing on the RPM Act, a witness from SEMA testified in favor of the bill.³⁴ In a 2017 House hearing, the then-president and general manager of the Sonoma Raceway testified in favor of the House version of the RPM Act.³⁵ Their testimony is more noteworthy and revealing based on what they did *not* say about the bills, more than what they did say.

Neither witness addressed the actual language of the two bills. Not one word about the changes to the Clean Air Act from adopting the amendments in the RPM Act. There is not even a cursory analysis of the legislation in either set of testimony. No mention about the legislation’s impact on air quality, public health and welfare, or EPA’s ability to enforce the Clean Air Act against illegal defeat devices and tampering. No acknowledgment that by then, in 2017, EPA had filed and settled multiple enforcement cases for Clean Air Act violations resulting from the manufacture and sale of aftermarket defeat devices and tampering for motor vehicles used on public roads.

It is understandable that the testimony of a raceway manager would not address these matters. Less understandable is why the SEMA testimony would omit any legislative analysis, mischaracterize the current state of the law on these topics (then and now), and mischaracterize the legal and real world consequences of the RPM Act. The SEMA testimony described EPA’s authority under the Clean Air Act as the authority “to enforce against anyone who offers, sells or installs products that *knowingly* take a regulated street vehicle out-of-compliance.”³⁶ That is false. That characterization limits and misrepresents the actual scope of EPA authority. The Clean Air Act does not require EPA to prove that a manufacturer, seller or installer of illegal defeat devices *knows* that the device is being used to defeat emissions controls and render vehicles used on roads and highways noncompliant.

Instead, the Clean Air Act makes it unlawful for:

³³ S.2659, <https://www.congress.gov/114/bills/s2659/BILLS-114s2659is.pdf>.

³⁴ <https://www.epw.senate.gov/public/index.cfm/hearings?ID=03FBE169-C399-40EB-AF89-C3C5FADBD524>

³⁵ <https://energycommerce.house.gov/committee-activity/hearings/hearing-on-big-relief-for-small-business-legislation-reducing-regulatory>.

³⁶ Testimony of Christopher J. Kersting, President & CEO, Specialty Equipment Market Association (Nov. 14, 2017) (emphasis added) (“SEMA Testimony”), https://www.epw.senate.gov/public/_cache/files/b/4/b4d8ea7d-ff84-4336-9ab8-b5d85bde1656/691068838E734FEFD3B4BB2798C17752.kersting-testimony-11.14.2017.pdf.

any person to manufacture or sell, or offer to sell, or install, any part or component intended for use with, or as part of, 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;

42 U.S.C. § 7522(a)(3)(B) (emphasis added). The SEMA testimony simply ignored, and therefore mischaracterized, the actual legal standard governing manufacture, sale and installation of illegal defeat devices. It is highly revealing that the SEMA testimony quoted no statutory provision, no EPA regulation, and no court decision to support the claim that EPA must prove knowing violations of section 203(a)(3) under the Clean Air Act. That is because no such support exists.³⁷

The SEMA testimony then mischaracterizes the legal and practical consequences of the RPM Act by describing it as a “narrowly-crafted bill which will restore certainty and the status quo under the law.”³⁸ This too is false. The *status quo*—then, now and since the 1990 Clean Air Act Amendments were adopted—has prohibited the manufacture, sale and installation of defeat devices that any person “should know” would be used for noncompliant, on-road motor vehicle uses. Continuing with the mischaracterization, the testimony declared that the “RPM Act does nothing to amend or alter EPA’s enforcement authority.” This is also incorrect: S.2376 amends Clean Air Act section 203(a) with the following language:

No action with respect to any device or element of design described in paragraph (3) shall be treated as a prohibited act under that paragraph if the action is *for the purpose of modifying* a motor vehicle into a vehicle to be used solely for competition, and that vehicle is not authorized for operation on a street or highway.

S.2376, Sec. 3(a) (emphasis added). This language “alter[s] EPA’s enforcement authority” by weakening the prohibition on defeat device manufacture, sale and installation. Following adoption of the RPM Act, a defeat device defendant company will say it was not its purpose to manufacture, sell or install defeat devices that would be used in ways other than “solely for competition”—even if the defendant should have known the devices would be used on roads and highways, or even though the defendant failed to show or inquire whether the device was being used solely for competition.

³⁷ See, e.g., Gear Box Ruling, *supra*, 526 F. Supp., at 528 (legal standard under 42 U.S.C. § 7522(a)(3)(B) is whether any person “knows or should know” products are “being offered for sale or installed” as defeat devices”). This ruling shows judges will not allow defeat device manufacturers or sellers to “claim a lack of knowledge simply by not keeping sales records,” especially when their own advertising materials and Internet sales are aimed at general consumers. *Id.*

³⁸ SEMA Testimony, at 2.

The EPA Letter to Senator Reed said that “many companies that make and sell aftermarket defeat devices claim ‘competition only’ use but cannot provide any information to show that their products are used in competition motorsports.” EPA Letter to Senator Reed, at 3. Similarly, the letter noted defeat device manufacturers and sellers “operate wholesale or internet-based retail businesses that sell indiscriminately to the public at large. Some utilize point-of-sale disclaimers or require buyers to check a box to acknowledge the part is for ‘competition only,’ *but such measures are inadequate for keeping aftermarket defeat devices off vehicles used on public roads.*” *Id.* (emphasis added) Were the RPM Act to be adopted, defeat device manufacturers and sellers would argue their defeat devices were not made or sold “for the purpose of” tampering with certified motor vehicles, raising “point-of-sale disclaimers or require[ing] buyers to check a box to acknowledge the part is for ‘competition only,’” in addition to other plainly inadequate steps. These inadequate practices would multiply on defeat device websites, while manufacturers and sellers would continue to know (as the Gear Box judge found) these products would be used on street vehicles.

The RPM Act represents an unjustified weakening of the law’s prohibition on illegal tampering and defeat devices. It is an irresponsible limitation on EPA’s enforcement authorities. The legislation would worsen decades of Clean Air Act and regulatory safeguards; undermine or prevent successful bi-partisan prosecution of enforcement cases against tampering and defeat device manufacture, sale and installation; ignore the lessons from bi-partisan EPA legal settlements; multiply noncompliance on America’s public roads; and worsen air quality and public health. For all these reasons, I respectfully urge the Committee not to enact S. 2736, the RPM Act of 2021.

IV. S. 1475 – the Livestock Regulatory Protection Act of 2021, is Unjustified and Unnecessary

S. 1475 would codify a permanent prohibition on any federal, state, or tribal operating permit under the Clean Air Act “for any carbon dioxide, nitrogen oxide, water vapor, or methane emissions resulting from biological processes associated with livestock production.”³⁹ This exemption is unjustified due to the hazardous nature of emissions from livestock production, and the reduction in public awareness and accountability for these emissions. Moreover, a permanent exemption is unnecessary because Congress has adopted appropriations riders in recent years to accomplish the same outcome as this legislation but, importantly, only on an annual basis that allows yearly review to determine whether the exemption remains appropriate for the following year.⁴⁰ S. 1475 dispenses with that annual opportunity for review and grants permanent relief to harmful air pollution from livestock operations.

Congress adopted a first-time operating permit program for sources of air pollution in the 1990 Clean Air Act Amendments. 42 U.S.C. § 7661 *et seq.* The congressional purpose for the new program was to “(1) better enforce the requirements of the law by applying them more

³⁹ S. 1475, Sec. 2 (amending section 502(f) of the Clean Air Act, 42 U.S.C. § 7661a(f)).

⁴⁰ *See, e.g.*, Deena Shanker, “U.S. Spending Bill Set to Limit Regulation of Livestock Emissions,” *Bloomberg* (March 10, 2022), <https://www.bloomberg.com/news/articles/2022-03-10/spending-bill-to-limit-environmental-regulation-of-livestock>.

clearly to individual sources and allowing better tracking of compliance, and (2) provide an expedited process for implementing new control requirements.”⁴¹ EPA’s original regulations for the program explain that “[t]he Title V permit program will enable the source, States, EPA, and the public to understand better the requirements to which the source is subject, and whether the source is meeting those requirements. Increased source accountability and better enforcement should result. The program also will greatly strengthen EPA’s ability to implement the [Clean Air Act] and enhance air quality planning and control, in part, by providing the basis for better emission inventories.”⁴²

S. 1475 would prevent the possibility of these benefits by singling out livestock operations for special, deregulatory treatment under the Clean Air Act, nearly alone among major sources of regulated air pollutants. It is important to note that the Act already requires operating permits only for “major sources” of regulated air pollutants (or regulated pollutants), including nitrogen oxides and greenhouse gases like carbon dioxide and methane.⁴³ Air pollution from livestock operations is a serious problem in the U.S. that does not justify a permanent exemption from the Clean Air Act’s operating permit program.

The agriculture sector in the United States produces more methane, a greenhouse gas super pollutant, than the oil and gas sector.⁴⁴ Agriculture is responsible for 256.5 million metric tons of carbon dioxide-equivalent (CO₂e) emissions. *Id.* Of this total, the vast majority—178.6 million metric tons of CO₂e emissions—are from “enteric fermentation,” a natural part of the digestive process in domestic livestock. *Id.* And a recent study suggests U.S. animal methane emissions may be even higher than that: “in the US, where animal production is predominantly highly intensified with confined feeding operations, animal methane emissions may be 39%–90% higher than bottom-up models predict (expressed as mean differences across studies).”⁴⁵

⁴¹ U.S. Congress, Senate, Committee on Environment and Public Works, “Clean Air Act Amendments of 1989, report to accompany S. 1630,” S. Rept. 101-228, 101st Congress, 1st session, pp. 346-348.

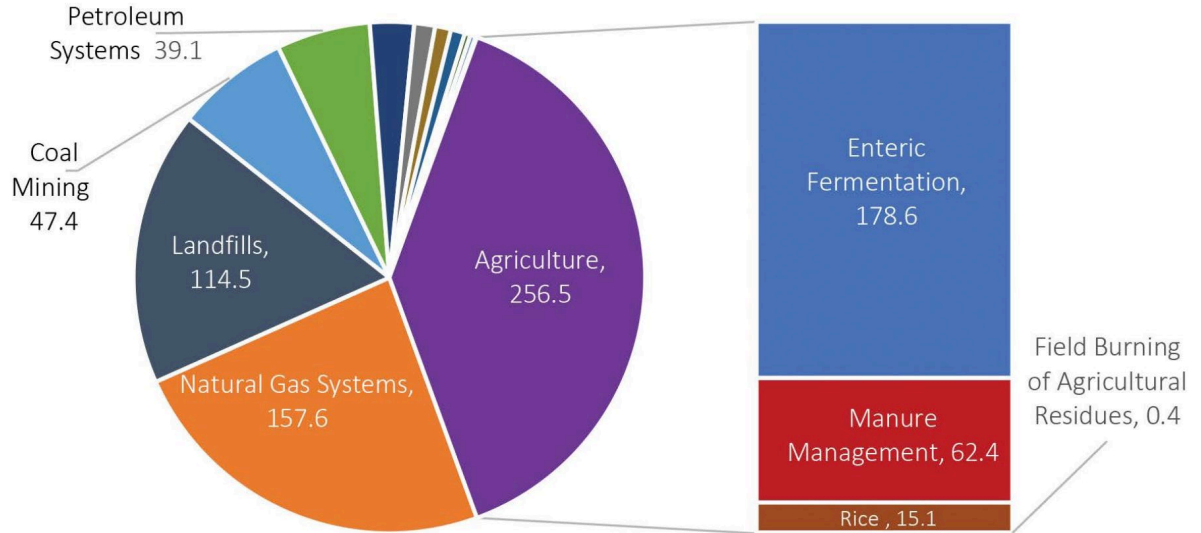
⁴² 57 Fed. Reg. 32,250, 32,251/3 (July 21, 1992).

⁴³ See 42 U.S.C. § 7661(2); 40 C.F.R. § 70.2 (definitions of “regulated air pollutant” & “regulated pollutant”).

⁴⁴ White House Office of Domestic Climate Policy, “U.S. Methane Emissions Reduction Action Plan” (Nov. 2021), at 13 <https://www.whitehouse.gov/wp-content/uploads/2021/11/US-Methane-Emissions-Reduction-Action-Plan-1.pdf>.

⁴⁵ Matthew N. Hayek & Scott M. Miller, “Underestimates of methane from intensively raised animals could undermine goals of sustainable development,” 2021 *Environ. Res. Lett.* **16** 063006 (quoting Abstract).

U.S. Methane Emission Sources, 2019 (Million Metric Tons of CO₂e)



Source: Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2019, EPA

As of 2017, concentrated animal feeding operations (CAFOs) (for beef cattle, dairy cows, swine and chickens) were the nation’s largest source of ammonia emissions, which are both directly toxic and a particulate matter (PM) precursor.^{46, 47} When CAFO waste decomposes, it releases hydrogen sulfide, ammonia, and hundreds of volatile organic compounds. Waste pits, animal confinement buildings, and waste applied to fields emit these gasses and compounds into the air.⁴⁸

Numerous studies show that air pollutants and odors from CAFOs travel into nearby communities; community members report these negative experiences and associated health hazards.⁴⁹ Exposure to CAFO air pollutants can cause nausea, headaches, dizziness, runny noses,

⁴⁶ See EPA, *2017 National Emissions Inventory (NEI) Data*, <https://www.epa.gov/air-emissions-inventories/2017-national-emissions-inventory-nei-data#dataq> (“Data Queries” section, select “Ammonia – NH₃” in “Pollutant” selection box).

⁴⁷ The Sustainable Food & Farming Program at Earthjustice provided substantial assistance with the studies and other materials cited in this section of my testimony.

⁴⁸ See Virginia T. Guidry *et al.*, “Hydrogen Sulfide Concentrations at Three Middle Schools Near Industrial Livestock Facilities,” 27 *J. Exposure Sci. & Env’t Epidemiology* 167 (2017).

⁴⁹ See, e.g., Dana Cole *et al.*, “Concentrated Swine Feeding Operations and Public Health: A Review of Occupational and Community Health Effects,” 108 *Env’t Health Persps.* 685, 693 (2000)(explaining that gasses, dusts, and odors from CAFOs can travel long distances and cause health concerns in neighboring communities); Kelley J. Donham *et al.*, “Community Health and Socioeconomic Issues Surrounding Concentrated Animal Feeding Operations,” 115 *Env’t Health Persps.* 317, 318 (2007) (noting that air quality assessments in communities near CAFOs show concentrations of hydrogen sulfide and ammonia); Yelena Ogneva-Himmelberger *et al.*, “CALPUFF and CAFOs: Air Pollution Modeling and Environmental Justice Analysis in the North Carolina Hog Industry,” 4 *Int’l J. Geo-Information* 150 (2015) (finding that ammonia

scratchy throats, burning eyes, coughing, wheezing, and shortness of breath.⁵⁰ Exposure to air pollutants associated with CAFOs, like nitrogen oxides and particulate matter, is linked to high rates of COVID-19 infection and severity.⁵¹ Indeed, a 2021 study even found that “[a]gricultural production in the United States results in 17,900 annual air quality–related deaths, 15,900 of which are from food production. Of those, 80% are attributable to animal-based foods, both directly from animal production and indirectly from growing animal feed.”⁵² This study found various air pollution-management solutions on farms “can reduce PM_{2.5}-related mortality by 50%.” *Id.*

In light of these hazards, it is not responsible to exempt livestock operations permanently from the Clean Air Act operating permit program, one in which permits are issued overwhelmingly by states, not EPA. The program provides opportunities to monitor and report emissions to States, EPA, and the public, furthering the goals of public awareness, accountability and the desirability of reducing those emissions. Importantly, the operating permit program collects but does not alter any existing requirements under federal or state laws, nor does it impose new substantive emissions control requirements.⁵³

The language of S. 1475 also suffers from being vague and overbroad. Exempting emissions from “biological processes associated with livestock production” (S. 1475, sec. 2) could be read to exempt not just enteric (digestion-related) emissions, but also emissions from manure and even feed crop-related emissions. If this is the intent, the bill is even more unreasonable to exempt emissions from these practices permanently.

Finally, the Committee should not add any permanent exemption for livestock operations to the Clean Air Act, because Congress can use and has used annual appropriations riders to halt permits for such emissions—but on an annual basis. This approach gives Congress the chance to assess the state of emissions from livestock operations, the harm they are causing to Americans, the state of Research & Development for practices to manage livestock emissions, and the wisdom of continuing or abandoning such riders. Indeed, there are examples of Congress including similar restrictions in annual appropriations bills for several years, only to conclude later that such appropriations limitations were no longer warranted.⁵⁴ A permanent Clean Air Act

concentrations in areas downwind of swine CAFOs were up to three times higher than the average concentration in the watershed, exposing approximately 3,500 people to ammonia concentrations higher than the minimal risk level).

⁵⁰ See Kendall M. Thu *et al.*, “A Control Study of the Physical and Mental Health of Residents Living Near a Large-Scale Swine Operation,” 3 *J. Agric. Safety & Health* 13, 16–18 (1997).

⁵¹ See Biswaranjan Paital & Pawan Kumar Agrawal, “Air Pollution by NO₂ and PM_{2.5} Explains COVID-19 Infection and Severity by Overexpression of Angiotensin-Converting Enzyme 2 in Respiratory Cells: A Review,” 19 *Env’t Chemistry Letters* 25, 25 (2021).

⁵² Nina G.G. Domingo *et al.*, “Air Quality-Related Health Damages of Food,” 118 *Proceedings Nat’l Acad. Scis.*, at 1, 2, Fig. 1, & Abstract (2021).

⁵³ 57 Fed. Reg., at 32,251/2, 32,275, 32,284.

⁵⁴ See, e.g., Greg Dotson, “State Authority to Regulate Mobile Source Greenhouse Gas Emissions, Part 1: History and Current Challenge,” 49 *Envtl. L. Reporter* 11037 (2019) (discussing a prohibition on NHTSA using appropriated funds for the purpose of issuing rules for fuel economy).

exemption sharply reduces the prospect of responsible assessments, and will only exacerbate community controversies and concerns surrounding air pollution from livestock operations.

For these reasons, I respectfully urge the Committee not to enact S. 1475, the Livestock Regulatory Protection Act of 2021.

Appendix A

Table 5. Observed Class 2b and 3 Tampering from 2009 through 2019 by State

State	Estimated Deleted Vehicles	Estimated Registered Diesel Vehicles (2016)	Estimated Deleted Vehicles, % of Total 2016 Fleet	Estimated Registered Diesel Vehicles (2016), 2003+ MY Only	Estimated Deleted Vehicles, % of Total 2016 Fleet, 2003+ MY Only	Estimated Excess NO _x from Class 2b and 3 Vehicles Deleted (tons)	Estimated Excess PM from Class 2b and 3 Vehicles Deleted (tons)
NORTH DAKOTA	7,901	42,389	18.6%	30,907	25.6%	8,085	77
IDAHO	13,474	89,880	15.0%	55,183	24.4%	13,787	131
WYOMING	8,619	60,803	14.2%	43,159	20.0%	8,819	84
MAINE	2,794	20,738	13.5%	13,511	20.7%	2,859	27
VERMONT	1,718	12,768	13.5%	8,988	19.1%	1,758	17
MICHIGAN	18,382	140,885	13.0%	87,406	21.0%	18,809	178
WEST VIRGINIA	5,336	41,286	12.9%	26,426	20.2%	5,460	52
WASHINGTON	23,646	183,479	12.9%	108,030	21.9%	24,195	229
NEW HAMPSHIRE	2,748	21,622	12.7%	14,334	19.2%	2,812	27
ILLINOIS	18,245	144,196	12.7%	95,433	19.1%	18,669	177
KENTUCKY	11,821	93,931	12.6%	54,128	21.8%	12,096	115
OHIO	19,459	160,536	12.1%	95,798	20.3%	19,911	189
OREGON	17,436	146,318	11.9%	85,300	20.4%	17,841	169
INDIANA	14,134	119,371	11.8%	71,071	19.9%	14,462	137
ALABAMA	11,962	101,156	11.8%	62,898	19.0%	12,240	116
NEW MEXICO	8,935	79,903	11.2%	53,799	16.6%	9,143	87
TENNESSEE	14,084	128,017	11.0%	73,850	19.1%	14,412	137
MONTANA	9,199	84,114	10.9%	53,605	17.2%	9,412	89
NEVADA	6,966	64,815	10.7%	44,112	15.8%	7,128	68
IOWA	8,798	82,149	10.7%	55,617	15.8%	9,002	85
MISSOURI	15,359	144,439	10.6%	90,418	17.0%	15,716	149
ALASKA	3,783	35,863	10.5%	21,067	18.0%	3,870	37
KANSAS	8,302	79,604	10.4%	49,537	16.8%	8,495	81
PENNSYLVANIA	18,146	176,756	10.3%	110,551	16.4%	18,567	176
SOUTH CAROLINA	7,477	73,890	10.1%	44,277	16.9%	7,651	73
MINNESOTA	10,607	104,892	10.1%	66,706	15.9%	10,854	103
OKLAHOMA	15,252	151,357	10.1%	103,592	14.7%	15,607	148
FLORIDA	24,619	246,883	10.0%	162,943	15.1%	25,191	239
VIRGINIA	11,832	118,906	10.0%	72,247	16.4%	12,107	115
NEW YORK	13,611	137,966	9.9%	87,351	15.6%	13,927	132
COLORADO	16,348	168,555	9.7%	108,022	15.1%	16,728	159
GEORGIA	15,210	157,047	9.7%	97,756	15.6%	15,564	148
MISSISSIPPI	6,447	67,411	9.6%	41,564	15.5%	6,596	63
MARYLAND	6,779	72,795	9.3%	49,642	13.7%	6,936	66
WISCONSIN	10,374	112,004	9.3%	71,895	14.4%	10,615	101
NORTH CAROLINA	13,810	153,823	9.0%	92,973	14.9%	14,130	134

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TEXAS	64,758	754,102	8.6%	542,198	11.9%	66,262	628
LOUISIANA	11,413	133,442	8.6%	95,826	11.9%	11,678	111
ARIZONA	11,478	135,061	8.5%	90,494	12.7%	11,744	111
NEBRASKA	5,309	62,547	8.5%	40,866	13.0%	5,433	51
DELAWARE	924	11,286	8.2%	7,658	12.1%	945	9
SOUTH DAKOTA	3,741	46,168	8.1%	30,879	12.1%	3,827	36
ARKANSAS	5,840	78,589	7.4%	50,332	11.6%	5,976	57
CONNECTICUT	2,992	40,475	7.4%	23,363	12.8%	3,062	29
MASSACHUSETTS	3,859	52,778	7.3%	33,693	11.5%	3,949	37
UTAH	8,103	112,467	7.2%	76,577	10.6%	8,292	79
HAWAII	1,057	15,195	7.0%	9,993	10.6%	1,082	10
RHODE ISLAND	626	9,024	6.9%	5,200	12.0%	641	6
NEW JERSEY	4,905	87,048	5.6%	53,862	9.1%	5,019	48
CALIFORNIA	8,859	480,539	1.8%	322,678	2.7%	9,065	86
Totals	557,478	5,839,268	9.55%	3,787,715	14.72%	570,423	5,407