

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 69, 80, and 86

[AMS-FRL-6923-7]

RIN 2060-AI69

Control of Air Pollution from New Motor Vehicles: Heavy-Duty Engine and Vehicle Standards and Highway Diesel Fuel Sulfur Control Requirements

AGENCY: Environmental Protection Agency.

ACTION: Final rule.

SUMMARY: The pollution emitted by diesel engines contributes greatly to our nation's continuing air quality problems. Even with more stringent heavy-duty highway engine standards set to take effect in 2004, these engines will continue to emit large amounts of nitrogen oxides and particulate matter, both of which contribute to serious public health problems in the United States. These problems include premature mortality, aggravation of respiratory and cardiovascular disease, aggravation of existing asthma, acute respiratory symptoms, chronic bronchitis, and decreased lung function. Numerous studies also link diesel exhaust to increased incidence of lung cancer. We believe that diesel exhaust is likely to be carcinogenic to humans by inhalation and that this cancer hazard exists for occupational and environmental levels of exposure.

We are establishing a comprehensive national control program that will regulate the heavy-duty vehicle and its fuel as a single system. As part of this program, new emission standards will begin to take effect in model year 2007, and will apply to heavy-duty highway engines and vehicles. These standards are based on the use of high-efficiency catalytic exhaust emission control devices or comparably effective advanced technologies. Because these devices are damaged by sulfur, we are also reducing the level of sulfur in highway diesel fuel significantly by mid-2006. The program provides substantial flexibility for refiners,

especially small refiners, and for manufacturers of engines and vehicles. These options will ensure that there is widespread availability and supply of the low sulfur diesel fuel from the very beginning of the program, and will provide engine manufacturers with the lead time needed to efficiently phase-in the exhaust emission control technology that will be used to achieve the emissions benefits of the new standards.

We estimate that heavy-duty trucks and buses today account for about one-third of nitrogen oxides emissions and one-quarter of particulate matter emissions from mobile sources. In some urban areas, the contribution is even greater. This program will reduce particulate matter and oxides of nitrogen emissions from heavy duty engines by 90 percent and 95 percent below current standard levels, respectively. In order to meet these more stringent standards for diesel engines, the program calls for a 97 percent reduction in the sulfur content of diesel fuel. As a result, diesel vehicles will achieve gasoline-like exhaust emission levels. We are also finalizing more stringent standards for heavy-duty gasoline vehicles, based in part on the use of the low sulfur gasoline that will be available when the standards go into effect.

The clean air impact of this program will be dramatic when fully implemented. By 2030, this program will reduce annual emissions of nitrogen oxides, nonmethane hydrocarbons, and particulate matter by a projected 2.6 million, 115,000 and 109,000 tons, respectively. We project that these reductions and the resulting significant environmental benefits of this program will come at an average cost increase of about \$2,000 to \$3,200 per new vehicle in the near term and about \$1,200 to \$1,900 per new vehicle in the long term, depending on the vehicle size. In comparison, new vehicle prices today can range well over \$100,000 for larger heavy-duty vehicles. We estimate that when fully implemented the sulfur reduction requirement will increase the cost of producing and distributing diesel fuel by about five cents per gallon.

DATES: This rule will become effective March 19, 2001. The incorporation by reference of certain publications listed in this rule is approved by the Director of the Office of Federal Register as of March 19, 2001.

ADDRESSES: *Comments:* All comments and materials relevant to today's action have been placed in Public Docket No. A-99-06 at the following address: U.S. Environmental Protection Agency (EPA), Air Docket (6102), Room M-1500, 401 M Street, SW, Washington, DC 20460 (on the ground floor in Waterside Mall) from 8:00 a.m. to 5:30 p.m., Monday through Friday, except on government holidays. You can reach the Air Docket by telephone at (202) 260-7548 and by facsimile at (202) 260-4400. We may charge a reasonable fee for copying docket materials, as provided in 40 CFR part 2.

FOR FURTHER INFORMATION CONTACT: Margaret Borushko, U.S. EPA, National Vehicle and Fuel Emissions Laboratory, 2000 Traverwood, Ann Arbor MI 48105; Telephone (734) 214-4334, FAX (734) 214-4816, E-mail borushko.margaret@epa.gov

SUPPLEMENTARY INFORMATION:

Regulated Entities

This action will affect you if you produce or import new heavy-duty engines which are intended for use in highway vehicles such as trucks and buses, or produce or import such highway vehicles, or convert heavy-duty vehicles or heavy-duty engines used in highway vehicles to use alternative fuels, or produce or import light-duty highway diesel vehicles. It will also affect you if you produce, import, distribute, or sell highway diesel fuel, or sell nonroad diesel fuel.

The following table gives some examples of entities that may have to follow the regulations. But because these are only examples, you should carefully examine the regulations in 40 CFR parts 69, 80, and 86. If you have questions, call the person listed in the **FOR FURTHER INFORMATION CONTACT** section of this preamble:

Category	NAICS Codes ^a	SIC Codes ^b	Examples of potentially regulated entities
Industry	336112	3711	Engine and Truck Manufacturers
	336120		
Industry	811112	7533	Commercial Importers of Vehicles and
	811198	7549	Vehicle Components
Industry	324110	2911	Petroleum Refiners
Industry	422710	5171	Diesel Fuel Marketers and Distributors
	422720	5172	
industry	484220	4212	Diesel Fuel Carriers

- D. Intergovernmental Relations
 - 1. Unfunded Mandates Reform Act
 - 2. Executive Order 13084: Consultation and Coordination with Indian Tribal Governments
- E. National Technology Transfer and Advancement Act
- F. Executive Order 13045: Children's Health Protection
- G. Executive Order 13132: Federalism
- H. Congressional Review Act
- XI. Statutory Provisions and Legal Authority

I. Overview

This rule covers the second of two phases in a comprehensive nationwide program for controlling emissions from heavy-duty engines (HDEs) and vehicles. It builds upon the phase 1 program we recently finalized (65 FR 59896, October 6, 2000). That action affirmed the 50 percent reduction in emissions of oxides of nitrogen (NO_x) from 2004 model year highway diesel engines, set in 1997 (62 FR 54693, October 21, 1997), and set new emission standards for heavy-duty gasoline-fueled engines and vehicles for 2005.

This second phase of the program looks beyond 2004, based on the use of high-efficiency exhaust emission control devices and the consideration of the vehicle and its fuel as a single system. In developing this rule, we took into consideration comments received in response to the advance notice of proposed rulemaking (64 FR 26142, May 13, 1999) and the notice of proposed rulemaking (NPRM) (65 FR 35430, June 2, 2000), including comments provided at five public hearings last June.

This program will result in particulate matter (PM) and NO_x emission levels that are 90 percent and 95 percent below the standard levels in effect today, respectively. In order to meet these more stringent standards for diesel engines, the rule mandates a 97 percent reduction in the sulfur content of diesel fuel. The heavy-duty engine standards will be effective starting in the 2007 model year and the low sulfur diesel fuel needed to facilitate the standards will be widely available in September 2006. As a result, diesel vehicles will achieve gasoline-like exhaust emission levels, in addition to their inherent advantages over gasoline vehicles with respect to fuel economy, lower greenhouse gas emissions, and lower evaporative hydrocarbon emissions. The rule also includes more stringent standards for heavy-duty gasoline vehicles. In addition to its impact on heavy-duty vehicle emissions, this rule will make clean diesel fuel available in time for implementation of the light-duty Tier 2 standards.

The standards will result in substantial benefits to public health and

welfare and the environment through significant reductions in emissions of NO_x, PM, nonmethane hydrocarbons (NMHC), carbon monoxide (CO), sulfur oxides (SO_x), and air toxics. We project that by 2030, this phase 2 program will reduce annual emissions of NO_x, NMHC, and PM by 2.6 million, 115,000 and 109,000 tons, respectively. These emission reductions will prevent 8,300 premature deaths, over 9,500 hospitalizations, and 1.5 million work days lost. All told the benefits of this rule equal \$70.3 billion. A sizeable part of the benefits in the early years of this program come from large reductions in the amount of direct and secondary PM caused by the existing fleet of heavy-duty vehicles. These reductions are due to the use of the higher quality diesel fuel in these vehicles.

A. What Requirements Are Being Set?

There are two basic parts to this program: (1) New exhaust emission standards for heavy-duty highway engines and vehicles, and (2) new quality standards for highway diesel fuel. The systems approach of combining the engine and fuel standards into a single program is critical to the success of our overall efforts to reduce emissions, because the emission standards will not be feasible without the fuel change. The feasibility of the emission standards is based on the use of high-efficiency exhaust emission control devices that would be damaged by sulfur in the fuel. This rule, by providing extremely low sulfur diesel fuel, will also enable cleaner diesel passenger vehicles and light-duty trucks. This is because the same pool of highway diesel fuel also services these light-duty diesel vehicles, and these vehicles can employ technologies similar to the high-efficiency heavy-duty exhaust emission control technologies that will be enabled by the fuel change. We believe these technologies are needed for diesel vehicles to comply with our Tier 2 emissions standards for light-duty highway vehicles (65 FR 6698, February 10, 2000).

We believe that this systems approach is a comprehensive way to enable effective new technologies for clean diesel, affecting all sizes of highway diesel engines, and may translate to future reductions from diesel engines used in nonroad applications too. The fuel change, in addition to enabling new technologies, will also produce emissions and maintenance benefits in the existing fleet of highway diesel vehicles. These benefits will include reduced sulfate PM and sulfur oxides emissions, reduced engine wear and less

frequent oil changes, and longer-lasting exhaust gas recirculation (EGR) components on engines equipped with EGR. Heavy-duty gasoline vehicles will also be expected to have much lower emissions due to the transfer of recent technology developments for light-duty applications, and the recent action taken to reduce sulfur in gasoline as part of the Tier 2 rule.

The basic elements of the rule are outlined below. Detailed provisions and justifications for our rule are discussed in subsequent sections.

1. Heavy-Duty Emission Standards

We are finalizing a PM emissions standard for new heavy-duty engines of 0.01 grams per brake-horsepower-hour (g/bhp-hr), to take full effect for diesels in the 2007 model year.¹ We are also finalizing standards for NO_x and NMHC of 0.20 g/bhp-hr and 0.14 g/bhp-hr, respectively. These NO_x and NMHC standards will be phased in together between 2007 and 2010, for diesel engines. The phase-in will be on a percent-of-sales basis: 50 percent from 2007 to 2009 and 100 percent in 2010. This phase-in schedule differs somewhat from the proposed schedule for reasons explained in Section III. Gasoline engines will be subject to these standards based on a phase-in requiring 50 percent compliance in the 2008 model year and 100 percent compliance in the 2009 model year. This phase-in schedule also differs from that proposed for reasons explained in Section III. In addition, we are finalizing our proposal to include turbocharged diesels in the existing crankcase emissions prohibition, effective in 2007.

Standards for complete HDVs will be implemented on the same schedule as for gasoline engine standards. For certification of complete vehicles between 8500 and 10,000 pounds gross vehicle weight rating (GVWR), the standards are 0.2 grams per mile (g/mi) for NO_x, 0.02 g/mi for PM, 0.195 g/mi for NMHC, and 0.032 g/mi for formaldehyde.² For vehicles between

¹ Note that throughout this preamble we refer to diesel and gasoline vehicles and engines. We tend to use those terms given the preponderance of vehicles using diesel fuel or gasoline fuel in the U.S. heavy-duty highway market. However, when we refer to a diesel engine, we generally mean any engine using the diesel cycle. When we refer to a gasoline engine or vehicle, we generally mean any Otto-cycle vehicle or engine. Therefore, the emission standards discussed throughout this preamble apply equally to engines and vehicles fueled by alternative fuels, unless otherwise specified in the regulatory text accompanying today's rule.

² Vehicle weight ratings in this rule refer to GVWR (the curb weight of the vehicle plus its maximum recommended load of passengers and cargo) unless noted otherwise.

10,000 and 14,000 pounds, the standards are 0.4 g/mi for NO_x, 0.02 g/mi for PM, 0.230 g/mi for NMHC, and 0.040 g/mi for formaldehyde. These standards levels are roughly comparable to the engine-based standards in these size ranges. Note that these standards will not apply to vehicles above 8500 pounds that we classify as medium-duty passenger vehicles as part of our Tier 2 program.

Finally, we are adopting new evaporative emissions standards for heavy-duty engines and vehicles, effective on the same schedule as the gasoline engine and vehicle exhaust emission standards. The new standards for 8500 to 14,000 pound vehicles are 1.4 and 1.75 grams per test for the 3-day diurnal and supplemental 2-day diurnal tests, respectively. Standards levels of 1.9 and 2.3 grams per test will apply for vehicles over 14,000 pounds. These standards represent more than a 50 percent reduction in the numerical standards as they exist today.

The program includes flexibility provisions to facilitate the transition to the new standards and to encourage the early introduction of clean technologies, and adjustments to various testing and compliance requirements to address differences between the new technologies and existing engine-based technologies. These provisions are described in Sections III and VI.

2. Fuel Quality Standards

This rule specifies that, beginning June 1, 2006, refiners must begin producing highway diesel fuel that meets a maximum sulfur standard of 15 parts per million (ppm). All 2007 and later model year diesel-fueled vehicles must be refueled with this new low sulfur diesel fuel. This sulfur standard is based on our assessment of the impact of sulfur on advanced exhaust emission control technologies, and a corresponding assessment of the feasibility of low sulfur fuel production and distribution.

Today's program includes a combination of flexibilities available to refiners to ensure a smooth transition to low sulfur highway diesel fuel. First, refiners can take advantage of a temporary compliance option, including an averaging, banking and trading component, beginning in June 2006 and lasting through 2009, with credit given for early compliance before June 2006. Under this temporary compliance option, up to 20 percent of highway diesel fuel may continue to be produced at the existing 500 ppm sulfur maximum standard. Highway diesel fuel marketed as complying with the 500 ppm sulfur standard must be segregated

from 15 ppm fuel in the distribution system, and may only be used in pre-2007 model year heavy-duty vehicles. Second, we are providing additional hardship provisions for small refiners to minimize their economic burden in complying with the 15 ppm sulfur standard. Third, we are providing additional flexibility to refiners subject to the Geographic Phase-in Area (GPA) provisions of the Tier 2 gasoline sulfur program, which will allow them the option of staggering their gasoline and diesel investments. Finally, we are adopting a general hardship provision for which any refiner may apply on a case-by-case basis under certain conditions. These hardship provisions, coupled with the temporary compliance option, will provide a "safety valve" allowing up to 25 percent of highway diesel fuel produced to remain at 500 ppm for these transitional years to minimize any potential for highway diesel fuel supply problems.

In addition, today's program includes unique provisions for implementing the low sulfur diesel fuel program in the State of Alaska, given that it is exempt from the current 500 ppm standard. Certain U.S. territories are excluded from both the new engine standards and highway diesel fuel standards.

The compliance provisions for ensuring diesel fuel quality are essentially consistent with those that have been in effect since 1993 under the existing 500 ppm sulfur standard (55 FR 34120, August 21, 1990). Additional compliance provisions have been established primarily during the transition years of the program to verify refiners' compliance with the temporary compliance option to ensure the two grades of highway diesel fuel remain segregated, and to discourage misfueling of model year 2007 and later diesel vehicles.

B. Why is EPA Taking This Action?

1. Heavy-Duty Vehicles Contribute to Serious Air Pollution Problems

As discussed in detail in Section II, emissions from heavy-duty vehicles contribute greatly to a number of serious air pollution problems, and would have continued to do so into the future absent further controls to reduce these emissions. First, heavy-duty vehicles contribute to the health and welfare effects of ozone, PM, NO_x, SO_x, and volatile organic compounds (VOCs), including toxic compounds such as formaldehyde. These adverse effects include premature mortality, aggravation of respiratory and cardiovascular disease (as indicated by increased hospital admissions and

emergency room visits, school absences, work loss days, and restricted activity days), changes in lung function and increased respiratory symptoms, changes to lung tissues and structures, altered respiratory defense mechanisms, chronic bronchitis, and decreased lung function. Ozone also causes crop and forestry losses, and PM causes damage to materials and soiling of commonly used building materials and culturally important items such as statues and works of art. Second, NO_x, SO_x and PM contribute to substantial visibility impairment in many parts of the U.S. Third, NO_x emissions from heavy-duty trucks contribute to the acidification, nitrification and eutrophication of water bodies. Fourth, the Agency has concluded, and the Clean Air Scientific Advisory Committee has approved in public session, that diesel exhaust is likely to be carcinogenic to humans.

Millions of Americans live in areas with unhealthful air quality that currently endangers public health and welfare. Without emission reductions from the standards for heavy-duty vehicles, there is a significant risk that an appreciable number of 45 areas with 128 million people across the country will violate the 1-hour ozone national ambient air quality standard (NAAQS) during the period when these standards will take effect. Furthermore, our analysis shows that PM₁₀ concentrations in 10 areas with a population of 28 million people face a significant risk of exceeding the PM₁₀ NAAQS without significant additional controls between 2007 and 2030. Under the mandates and authorities in the Clean Air Act, Federal, state, and local governments are working to bring ozone and particulate levels into compliance with the 1-hour ozone and PM₁₀ NAAQS through State Implementation Plan (SIP) attainment and maintenance plans, and to ensure that future air quality reaches and continues to achieve these health-based standards. The reductions in this rulemaking will play a critical part in these important efforts to attain and maintain the NAAQS. In addition, reductions from this action will also reduce public health and welfare effects associated with ozone and fine PM at concentrations that do not constitute a violation of the 1-hour ozone and PM₁₀ NAAQS.

Emissions from heavy-duty vehicles account for substantial portions of the country's ambient PM and NO_x levels. (NO_x is a key precursor to ozone formation). By 2007, we estimate that heavy-duty vehicles will account for 28 percent of mobile source NO_x emissions and 20 percent of mobile source PM emissions. These proportions are even

Newsroom News Releases By Date

EPA GIVES THE GREEN LIGHT ON DIESEL-SULFUR RULE

Release Date: 02/28/2001
Contact Information:

FOR RELEASE: WEDNESDAY, FEBRUARY 28, 2001

EPA GIVES THE GREEN LIGHT ON DIESEL-SULFUR RULE

Cathy Milbourn 202-564-7824

EPA Administrator Christie Whitman today directed that EPA move forward on schedule with its rule to make heavy-duty trucks and buses run cleaner. These vehicles, which will be ready by model year 2007, will cut harmful pollution by 95 percent. Sulfur in diesel fuel must be lowered to enable modern pollution-control technology to be effective on these trucks and buses. The Agency will require a 97 percent reduction in the sulfur content of highway diesel fuel from its current level of 500 parts per million to 15 parts per million.


In announcing this decision, Administrator Whitman said, "The Bush Administration determined that this action not be delayed in order to protect public health and the environment. I look forward to working with state and local governments to meet their air quality goals as well as with citizens and businesses to ensure that diesel trucks and buses remain a viable and important part of the nation=s economy."


Once this action is fully implemented, 2.6 million tons of smog-causing nitrogen oxide emissions will be reduced each year. Soot or particulate matter will be reduced by 110,000 tons a year. An estimated 8,300 premature deaths, 5,500 cases of chronic bronchitis and 17,600 cases of acute bronchitis in children will also be prevented annually. It is also estimated to help avoid more than 360,000 asthma attacks and 386,000 cases of respiratory symptoms in asthmatic children every year. In addition, 1.5 million lost work days, 7,100 hospital visits and 2,400 emergency room visits for asthma will be prevented.


Significant lead time is provided in the rule for the introduction of new cleaner fuel into the marketplace. Engine manufacturers will have flexibility to meet the new standards through a phase-in approach between 2007 and 2010. The fuel provision will go into effect in June 2006 and will be phased-in through 2009. The program also includes various flexible approaches, including additional time for some refiners and special provisions for small refiners. The final rule and related documents are available at:

www.epa.gov/otaq/diesel.htm.

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Frequently Asked Questions about Heavy-Duty “Glider Vehicles” and “Glider Kits”

Brief answers to common questions about potential changes to how EPA and NHTSA regulate glider vehicles.

What are heavy-duty “glider vehicles” and “glider kits”?

The term “glider kit” is used in the heavy-duty vehicle industry to describe a chassis and cab assembly that is generally produced by a vehicle manufacturer without a new engine, transmission, or rear axle. A third party then typically installs a used engine, transmission, and/or rear axle to complete assembly of the vehicle. The terms “glider vehicle” or “glider” are typically used for the completed vehicles.

Historically, gliders have been used as a means to salvage valuable components, such as used engines, transmissions, and axles, from vehicles that were badly damaged in collisions. Gliders have been most popular for salvaging the components of the largest and most expensive class of heavy-duty vehicles (i.e. “Class 8”). More recently the agencies have observed a sharp increase in glider sales, which suggests that gliders are being used more and more as a loophole to avoid purchasing engines that meet 2010 EPA emission standards, and potentially to avoid NHTSA safety regulations.

As discussed below, because of different regulatory frameworks for safety and emissions, NHTSA and EPA have subtle but important differences in their regulatory definitions of glider kits. NHTSA defines a “glider kit” as motor vehicle equipment that primarily includes the chassis and cab, but generally does not include the engine or rear axles. NHTSA is considering new regulations that would focus only on the completed glider vehicles. EPA defines “glider kits” to include both the complete and incomplete vehicles and applies its regulations to both. (See 40 CFR 1037.801 of EPA’s proposed regulatory text.)

Are emissions from gliders a significant problem?

Most gliders manufactured today use remanufactured model year 2001 or older engines. Typically these engines have NO_x and particulate matter (PM) emissions



20 to 40 times higher than today’s clean diesel engines. Since 2010 when EPA’s current NO_x and PM standards for heavy duty engines took effect, glider sales have increased nearly **10-fold** as compared to the 2004-2006 time frame.¹ EPA believes this increase reflects an attempt to avoid using engines that comply with EPA’s 2010 standards, and is an attempt to circumvent the Clean Air Act’s purpose to protect human health and the environment.

This increase in glider kit sales is a growing environmental concern. To give a sense of scale, annual glider sales now represent roughly **2%** of the Class 8 vehicles manufactured annually, and yet may account for as much as **one-half** of total NO_x and PM emissions from all new Class 8 vehicles. Put another way, at current production rates, the contribution of NO_x and PM emissions from gliders alone would nearly **double** the emissions of these pollutants from the entire Class 8 fleet.

The figure below illustrates in a relative sense how the NO_x and PM emissions from gliders have increased and how they compare to the rest of Class 8 sales. This figure is based on estimated current and historic glider production rates. The first bar represents the NO_x and PM emissions that would result from 500 “pre-emission” gliders, which was a typical annual sales volume before model year 2007. It shows that 500 gliders emitting 40 times the NO_x and PM would have the same total NO_x and PM emissions as 20,000 fully compliant vehicles. The second bar represents the NO_x and PM emissions from 5,000 model year 2014 “pre-emission” gliders. This second bar shows that just 5,000 of these gliders could emit as much NO_x and PM as 200,000 fully compliant 2014 Class 8 tractors. For comparison, the third bar shows the NO_x and PM emissions of 250,000 fully compliant model year 2014 Class 8 vehicles, which represents the typical annual production of fully compliant new Class 8 vehicles.

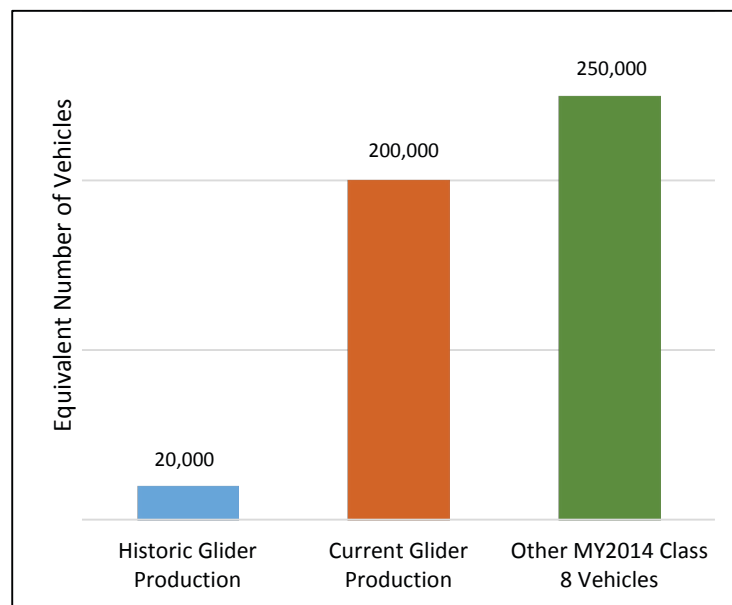


Figure 1 Growing Environmental Significance of Gliders

¹ Based on the following report that has been placed into the public docket for this rulemaking: “Industry Characterization of Heavy Duty Glider Kits”, MacKay & Company, September 30, 2013.

Does EPA consider glider kits to be new motor vehicles?

Yes. The Clean Air Act definition of “new motor vehicle” is not based on the condition of the parts assembled to create the vehicle but rather encompasses the entire vehicle. Thus, newly created gliders are “new motor vehicles” under the Clean Air Act, even if they incorporate some previously used components. Under this framework, glider kits are regulated by EPA the same as other incomplete new heavy-duty vehicles.

Some glider manufacturers and customers may attempt to circumvent this definition by retaining the Vehicle Identification Number (VIN) of the donor vehicle from which the used engine was obtained. However, this technicality does not mean that the new glider is actually the old vehicle.

When does NHTSA consider glider vehicles to be new motor vehicles?

NHTSA also determines whether or not a motor vehicle is “new” based on criteria other than its retention of a pre-existing VIN. NHTSA considers all completed glider vehicles to be new unless they have a transmission, engine, and drive axle that are not new, and at least two of those components are from the same “donor vehicle.” While NHTSA considers completed gliders to be motor vehicles, it does not consider glider kits (as it defines the term) to be motor vehicles. Rather, it considers glider kits to be “motor vehicle equipment.”

Are EPA and NHTSA proposing to ban gliders?

No, neither EPA nor NHTSA are proposing to ban gliders. EPA is clarifying which existing standards apply already to gliders, and is proposing new emissions requirements for certain gliders. NHTSA is considering setting similar standards for complete glider vehicles, but not for glider kits.

What is EPA proposing for gliders in this rulemaking?

In general, EPA is proposing three things:

- a. Clarifications to the existing HD Phase 1 EPA requirements for gliders.
- b. New requirements for most gliders to have engines installed that meet the same requirements as new emissions-compliant engines.
- c. Exceptions to the proposed new requirements for small businesses.

Each of these general areas is discussed further in related questions below.

- a. **What are the *existing* EPA requirements for gliders, and how are these being clarified?**

EPA is clarifying that gliders, because they are *“new vehicles”* under the Clean Air Act, are subject to EPA’s current HD Phase 1 GHG emission standards for new *vehicles* in 40 CFR part 1037, with some exemptions for small businesses. This means that glider vehicles not produced by small businesses are already required to comply with the HD Phase 1 vehicle standards.

The current regulations (which are being revised) have not prohibited the use of older model engines, such as those that have been rebuilt or remanufactured for additional use. However, these engines have always had to comply with emissions standards applicable to their own model year of manufacture. In other words, EPA's regulations have allowed older engines to be installed into new glider kits, as long as they remained in their originally certified configuration.

b. What new EPA requirements are being proposed in the HD Phase 2 Notice of Proposed Rulemaking?

EPA is proposing new requirements beginning January 1, 2018 that would generally require engines installed in new gliders to meet the same requirements as new emissions-compliant engines – both for GHGs and for other harmful pollutants such as NO_x and PM. For example, if a glider was produced in 2020, it could use any engine that met the standards for model year 2020 engines. This could be an earlier model year engine that was originally subject to the same requirements, such as a model year 2018 engine.

Beginning in model year 2021, Phase 2 standards for heavy duty vehicles would also apply to gliders.

c. What are the exemptions for small businesses that manufacture gliders for model years 2018 and beyond?

The HD Phase 1 regulations currently include an exemption for small businesses from all of the HD Phase 1 requirements of 40 CFR part 1037. This exemption, which was included in the Phase 1 rulemaking as an interim provision, also covers glider manufacturers. We are proposing to end this blanket exemption on January 1, 2018.

In place of the blanket exemption, EPA is proposing limited grandfathering of existing small businesses that currently install the used engines and other used parts into gliders. Under these special provisions, existing small businesses would be allowed to continue their production up to 300 assembled gliders per year under the same type of exemption that covered them in HD Phase 1. Any additional gliders an existing small business would produce (beyond their existing production rates or beyond 300 per year, as applicable) would need to meet the new proposed requirements for both engines and vehicles. These grandfathering provisions for existing small businesses should allow this industry to produce enough gliders to address legitimate purposes (e.g., salvaging engines and other parts from damaged vehicles). However, manufacturers that have significantly ramped up glider production in recent years to avoid EPA's 2010 NO_x and PM engine standards and other requirements, may need to alter their business practices.

How did EPA develop this small business exemption?

Prior to issuing the proposal, EPA convened a formal panel with the Small Business Administration (SBA) and the Office of Management and Budget (OMB) to consider ways to minimize impacts on small businesses. As a central part of this process, EPA invited potentially affected small businesses to serve as Small Entity Representatives (SERs) that would help the panel to identify and address adverse impacts on small businesses. One of the SERs was a small

manufacturer that assembled gliders. This manufacturer helped the panel to understand how this rule would impact small businesses that assemble gliders. Based in large part on this input, the panel recommended the exemption being proposed. The official Panel Report has been placed into the public docket for this rulemaking.

What are the existing NHTSA requirements for gliders, and is NHTSA considering adopting new provisions?

NHTSA does not currently consider glider kits or completed glider vehicles to be covered under NHTSA's HD Phase 1 standards. For completed glider vehicles, NHTSA is considering adopting requirements similar to EPA's proposed regulations. NHTSA would also consider special provisions for small business manufacturers consistent with the initial regulatory flexibility analysis that accompanies the rulemaking. NHTSA is not considering standards for glider kits (as NHTSA defines them).

Are EPA and NHTSA considering other options, and how can I provide new information to the agencies?

EPA is requesting comment on all of these proposed changes, and we may revise these provisions to offer more or less flexibility in the Final Rule. NHTSA is requesting comment on its consideration of similarly regulating completed glider vehicles, but not glider kits. Both agencies encourage commenters to provide data that would allow us to improve our proposal. See the notice for instructions on providing comments at:

www.epa.gov/otaq/climate/regs-heavy-duty.htm

or

www.nhtsa.gov/fuel-economy

AMENDMENT TO H.R. 2822, AS REPORTED
OFFERED BY MRS. BLACK OF TENNESSEE

At the end of the bill (before the short title), insert the following:

1 SEC. _____. None of the funds made available by this
2 Act may be used by the Environmental Protection Agency
3 to finalize, implement, administer, or enforce section
4 1037.601(a)(1) of title 40, Code of Federal Regulations,
5 as proposed to be revised under the proposed rule entitled
6 “Greenhouse Gas Emissions and Fuel Efficiency Stand-
7 ards for Medium- and Heavy-Duty Engines and Vehicles
8 - Phase 2” signed by the Administrator of the Environ-
9 mental Protection Agency on June 19, 2015 (Docket No.
10 EPA-HQ-OAR-2014-0827), or any rule of the same sub-
11 stance, with respect to glider kits and glider vehicles (as
12 defined in section 1037.801 of title 40, Code of Federal
13 Regulations, as proposed to be revised under such pro-
14 posed rule).





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July 8, 2015 | Press Release



To watch a video of Congressman Black's remarks, click [HERE](#) or the image above

Washington, DC– Today Congressman Diane Black (R-TN-06), introduced and successfully passed *H. Amdt. 630*, an amendment to the *Department of the Interior, Environment, and Related Agencies Appropriations Act* that would prohibit the Environmental Protection Agency (EPA) from applying its proposed “Phase 2” rules on greenhouse gas emissions standards for medium and heavy duty trucks to glider kits.

A glider kit is typically made up of a used engine installed into a new truck frame. Glider kits are manufactured in middle Tennessee by companies like Fitzgerald Glider Kits, which has locations in Byrdstown, Crossville, and Jamestown. Since purchasing a glider kit is cheaper than buying a completely new vehicle, many companies – like Charles Bailey Trucking in Sparta, B & M Trucking in Gallatin, and Cooper Recycling in Livingston, Sparta, and Monroe – will use glider kits as a cost-saving measure. By failing to offer an exemption for glider kits under its proposed Phase 2 regulations, the EPA will remove any incentive for businesses to

purchase or manufacture glider kits, effectively shutting down the glider kit industry altogether and destroying Tennessee jobs in the process.

Importantly, Congressman Black's amendment would not stop implementation of the proposed Phase 2 rule as a whole, but would simply prohibit the EPA from extending the rule to glider kits. Congressman Black and State Representative Kelly Keisling [toured Fitzgerald Glider Kits in Jamestown earlier this year](#) and heard firsthand how the proposed rule would impact their business and similar businesses in Tennessee.

Congressman Black's amendment passed the House by a voice vote. To watch a video of her remarks in support of her amendment, [click here](#). A transcript of her remarks as prepared for delivery is provided below:

Mister Speaker, I rise today to offer an amendment to protect Tennessee workers and small manufacturing businesses from the EPA's latest overreach.

Last month, the EPA released its "Phase 2" fuel-efficiency and emissions standards for new medium- and heavy-duty trucks. While many in the trucking industry are not opposed to this rule as a whole, one section in the proposal wrongly applies these new standards to what are known as glider kits.

I recently toured a business in my district that manufactures these kits so for those who don't know, a glider kit is a group of truck parts that can include a brand new frame, cab, or axles, but does not include an engine or transmission.

Since a glider kit is less expensive than buying a new truck, and can extend the working life of a truck, businesses and drivers with a damaged or older vehicle may choose to purchase one of these kits instead of buying a completely new vehicle. Unfortunately, the EPA is proposing to apply the new Phase 2 standards to glider kits, even though gliders are not really new vehicles

Mister Speaker, this directly impacts my district where we have glider kits being manufactured and purchased by companies in places like Byrdstown, Sparta, and Jamestown – communities that are already struggling with above-average unemployment and would see job opportunities put further out of reach if this misguided rule goes into effect.

It is also unclear whether the EPA even has the authority to regulate replacement parts like gliders in the first place.

What's more, while the EPA's stated goal with Phase 2 is to reduce greenhouse gas emissions, the agency has not studied the emissions impact of remanufactured engines and gliders compared to new vehicles.

Mister Speaker, if the EPA is going to promulgate rules that raise costs and hurt jobs in districts like mine the least they could do is have a few facts prepared to back them up.

Under this ill-advised rule, businesses and drivers that wish to use glider kits would be effectively forced to buy a completely new vehicle instead. Reducing glider sales would also end up limiting consumer choice in the marketplace

That is why my amendment protects businesses, jobs, and consumers by prohibiting the EPA from moving forward with these Phase 2 standards on glider kits. To be clear, this amendment would not bar the EPA from implementing the whole Phase 2 rule for medium and heavy-duty trucks. It would simply clarify that glider kits and glider vehicles are not new trucks as the EPA wrongly claims

I urge my colleagues to support this common-sense amendment to help support American manufacturing and stop the EPA from attempting to shut down the glider industry, and I reserve the balance of my time.

Click [HERE](#) for a high resolution photo of Congressman Black's May 28, 2015 visit to Fitzgerald Glider Kits in Jamestown with State Representative Kelly Keisling

###

Congressman Diane Black represents Tennessee's 6th Congressional District. She has been a registered nurse for more than 40 years and serves on the House Ways and Means and Budget Committees



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Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles - Phase 2

Response to Comments for Joint Rulemaking

Benefits of Controlling Emissions from Glider Vehicles

Reducing the number of glider vehicles produced using older engines will yield substantial improvements in public health. For example, using incidence-per-ton estimates, the number of PM_{2.5}-related premature mortalities caused by glider vehicles can be estimated from the lifetime reductions in both NO_x (which forms nitrate PM in secondary reactions) and directly emitted PM_{2.5}. Using benefit-per-ton values (described in Section IX.H of the FRM Preamble), the present value of total monetized PM_{2.5}-related benefits associated with these lifetime emission reductions can also be calculated. These health-related benefits are presented in the table below. Cases of premature mortality avoided are presented as a range based on results derived from two studies (the American Cancer Society cohort study - Krewski et al., 2009, and the Harvard Six-cities study - Lepeule et al., 2012). Monetized benefits are presented as net present values in 2013\$, assuming a 30-year vehicle lifetime and a 3% and 7% discount rate. Both premature mortalities and benefits are shown for model year 2017 glider vehicles based on the increase in lifetime emissions over a fully compliant model year 2017 vehicle. Note, as discussed below, there would be additional benefits that have not been quantified.

**Table A-4: Lifetime NO_x and PM Emissions Increases (tons)
For Model Year 2017 Glider Vehicles and Associated Benefits**

Increased Lifetime NO _x Emissions per 1,000 Glider Vehicles	41,500 Tons
Increased Lifetime PM _{2.5} Emissions per 1,000 Glider Vehicles	680 Tons
Premature Mortalities per 1,000 Glider Vehicles	70-160 Persons
Monetized PM _{2.5} -related Benefits Associated with Reducing Glider Production by 1,000 Vehicles	\$0.3-1.1 Billion

As noted above, the restriction on 2017 production that is being adopted is projected to prevent the use of high polluting pre 2002-engines in 5,000 to 10,000 glider vehicles, and would prevent the emission of 207,500-415,000 tons of NO_x and 3,400-6,800 tons of PM over the lifetime of those vehicles and engines. This is estimated to prevent 350 to 1,600 premature mortalities (and achieve \$1.5 to 11.0 billion in monetized PM_{2.5}-related benefits).

Several commenters argued that EPA is precluded from adopting any controls on installation of high polluting engines in glider vehicles until MY 2021. This could mean the production of 30,000 to 40,000 additional glider vehicles using the older high polluting engines. Using the same assumptions as above, these three additional model years of production are estimated to result in an additional 2,100 to 6,400 premature mortalities, incremental to the premature mortalities.

As described above, this sensitivity analysis uses estimates of the benefits from reducing the incidence of PM_{2.5}-related health impacts. These estimates, which are expressed per ton of PM_{2.5}-related emissions eliminated by adopting glider vehicle controls, represent the total monetized value of quantified human health benefits (including reduction in both premature mortality and premature morbidity) from reducing each ton of directly emitted PM_{2.5}, or its precursors (e.g., NO_x), from on-road mobile sources. Ideally, the human health benefits would be estimated based on changes in ambient PM_{2.5} as determined by full-scale air quality modeling. However, the length of time needed to prepare the necessary emissions inventories, in addition to the processing time associated with the modeling itself, has precluded us from performing air quality modeling for this analysis.

The benefit per-ton technique has been used in previous analyses, including EPA’s 2017-2025 Light-Duty Vehicle Greenhouse Gas Rule,²⁵⁶ the Reciprocating Internal Combustion Engine rules,^{257,258} and the Residential Wood Heaters NSPS.²⁵⁹ The table below shows the quantified PM_{2.5}-related benefits captured in the per-ton estimates, as well as unquantified PM_{2.5} effects the per-ton estimates are unable to capture.

Table A-5: Human Health and Welfare Effects of PM_{2.5}

POLLUTANT	QUANTIFIED AND MONETIZED IN PRIMARY ESTIMATES	UNQUANTIFIED EFFECTS CHANGES IN:
PM _{2.5}	Adult premature mortality Acute bronchitis Hospital admissions: respiratory and cardiovascular Emergency room visits for asthma Nonfatal heart attacks (myocardial infarction) Lower and upper respiratory illness Minor restricted-activity days Work loss days Asthma exacerbations (asthmatic population) Infant mortality	Cancer, mutagenicity, and genotoxicity effects Chronic and subchronic bronchitis cases Strokes and cerebrovascular disease Low birth weight Pulmonary function Chronic respiratory diseases other than chronic bronchitis Non-asthma respiratory emergency room visits Visibility Household soiling

This sensitivity analysis uses per ton benefits estimates taken from the "Technical Support Document Estimating the Benefit per Ton of Reducing PM_{2.5} Precursors from 17 Sectors," U.S. Environmental Protection Agency, Office of Air and Radiation, Office of Air Quality Planning and Standards, Research Triangle.²⁶⁰ The procedure for calculating benefit per ton coefficients follows three steps, shown graphically in Figure A-4 below:

²⁵⁶ U.S. Environmental Protection Agency (U.S. EPA). (2012). *Regulatory Impact Analysis: Final Rulemaking for 2017-2025 Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards*, Assessment and Standards Division, Office of Transportation and Air Quality, EPA-420-R-12-016, August 2012. Available on the Internet at: <http://www.epa.gov/otaq/climate/documents/420r12016.pdf>.

²⁵⁷ U.S. Environmental Protection Agency (U.S. EPA). (2013). *Regulatory Impact Analysis for the Reconsideration of the Existing Stationary Compression Ignition (CI) Engines NESHAP*, Office of Air Quality Planning and Standards, Research Triangle Park, NC. January. EPA-452/R-13-001. Available at http://www.epa.gov/ttnecas1/regdata/RIAs/RICE_NESHAPreconsideration_Compression_Ignition_Engines_RIA_final2013_EPA.pdf.

²⁵⁸ U.S. Environmental Protection Agency (U.S. EPA). (2013). *Regulatory Impact Analysis for Reconsideration of Existing Stationary Spark Ignition (SI) RICE NESHAP*, Office of Air Quality Planning and Standards, Research Triangle Park, NC. January. EPA-452/R-13-002. Available at http://www.epa.gov/ttnecas1/regdata/RIAs/NESHAP_RICE_Spark_Ignition_RIA_finalreconsideration2013_EPA.pdf.

²⁵⁹ U.S. Environmental Protection Agency (U.S. EPA). (2015). *Regulatory Impact Analysis for Residential Wood Heaters NSPS Revision*. Office of Air Quality Planning and Standards, Research Triangle Park, NC. February. EPA-452/R-15-001. Available at <http://www2.epa.gov/sites/production/files/2015-02/documents/20150204-residential-wood-heaters-ria.pdf>.

²⁶⁰ <https://www.epa.gov/sites/production/files/2014-10/documents/sourceapportionmentbpttsd.pdf>.

Conf.

RECV 10

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United States Senate

CHARLES E. GRASSLEY
WASHINGTON, DC 20510-1501

April 11, 2017

REPLY TO:

120 FEDERAL BUILDING
279 6TH STREET
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(712) 233-1880

210 WATERLOO BUILDING
631 COMMERCIAL STREET
WATERLOO, IA 50701-5497
(319) 732-6857

201 WILSON STREET
SUITE 720
DAVENPORT, IA 52801-1817
(563) 322-4331

307 FEDERAL BUILDING
8 SOUTH 6TH STREET
COURTNEY BLUFFS, IA 51501-4204
(712) 322-7103

Honorable John Koskinen
Commissioner of Internal Revenue
Internal Revenue Service
1111 Constitution Avenue, NW
Washington, DC 20224

Dear Commissioner Koskinen,

We are writing about a growing concern in the trucking industry concerning the application of the heavy truck excise tax in Internal Revenue Code (IRC) section 4051. We have heard complaints from a number of companies across several states that the Internal Revenue Service (IRS) has retroactively changed the applicability of the heavy truck excise tax to tractors refurbished using glider kits. As a result, several companies have been assessed millions of dollars in unpaid excise taxes. The size of the tax assessments, combined with the retroactive effect, endangers the continued operations of the affected companies and the livelihood of their employees.

For decades, companies have relied on the 75-percent safe harbor test in Revenue Ruling 91-27 to determine whether a tractor is refurbished, rather than manufactured, and thus not subject to the excise tax.⁽ⁱ⁾ Specifically, the ruling states that the restoration of a used tractor where one "uses a glider kit to repair the vehicle" will not give rise to a retailers excise tax "so long as the cost of the repair does not exceed 75 percent of the price of a comparable new vehicle."⁽ⁱⁱ⁾ In 1997, Congress codified this safe harbor and expanded its applicability in IRC section 4052(f).⁽ⁱⁱⁱ⁾

In February of 2013, the IRS Office of Chief Counsel released guidance favorable to taxpayers using glider kits to refurbish tractors. However, in January 2014, the IRS changed course and released a revised memorandum contradicting previous advice, as well as the applicability of the safe harbor rule for trucks refurbished using glider kits. Without any change in the statute or new rules published by the IRS, several companies now owe substantial sums in excise taxes for tractors refurbished in the same manner the IRS has previously examined and approved.

In December 2016, the IRS published additional guidance in the form of Notice 2016-81, which was soon replaced by the substantially similar Notice 2017-5. In these documents, for the first time, the IRS defined the term "chassis" for purposes of the heavy truck excise tax. It also provided guidance on the applicability of the 75-percent safe harbor rule in section 4052(f). The notices purport to be prospective with an effective date of January 9, 2017.

Committee Assignments:

AGRICULTURE
BUDGET
FINANCE

CO-CHAIRMAN,
INTERNATIONAL NARCOTICS
CONTROL CAUCUS

CHAIRMAN,
JUDICIARY

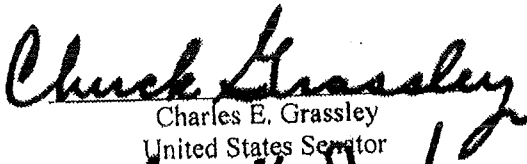
The companies contacting our offices however, all have had adverse actions taken against them prior to the release of either notice. Moreover, those actions appear to involve the issues discussed in Notice 2016-81 and Notice 2017-5. This raises concerns about fundamental fairness and whether adequate notice was provided to taxpayers.

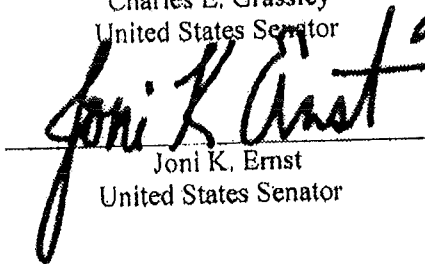
To help us better understand the IRS' actions, we would appreciate a response to the following questions:

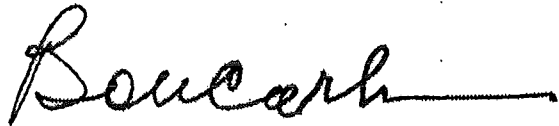
- 1) What prompted the IRS to issue Notice 2016-81 and Notice 2017-5? Please provide any relevant supporting documents, as well as a timeline for the issuance of Notice 2016-81 and ultimately Notice 2017-5.
- 2) Was Notice 2016-81 and/or Notice 2017-5 in any way issued in response to ongoing litigation or to provide the IRS support for those actions?
- 3) Has the IRS utilized Notice 2017-5 to retroactively support its arguments in actions begun prior to its issuance and/or its January 9, 2017 effective date? If so, what is the justification for its retroactive application?

We appreciate your attention to this issue and look forward to your response.

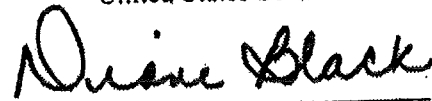
Sincerely,


Charles E. Grassley
United States Senator


Joni K. Ernst
United States Senator



Bob Corker
United States Senator



Diane Black
United States Representative

(i) Rev. Rul. 91-27, *Heavy Vehicles; Restoration*, April 15, 1991

(ii) *Id.*

(iii) Taxpayer Relief Act of 1997, P.L. 105-34 at section 1434



[← Previous](#) | [Next](#)

If the vehicle registration for a commercial motor vehicle reflect a model year of 2000 or newer, but the engine plate or documentation from the manufacturer indicates that the engine is older than model year 2000, is the vehicle exempt from the ELD rule?

Yes. While an ELD may voluntarily be used in vehicles that are model year 1999 or older, use of an ELD is not required in these vehicles; likewise, vehicles with engines predating model year 2000 are to be treated as exempt, even if the VIN number reported on the registration indicates that the CMV is a later model year. When a vehicle is registered, the model year should follow the criteria established by the National Highway Traffic Safety Administration (NHTSA). There may be instances where the model year reflected on the vehicle registration is not the same as the engine model year, most commonly when a vehicle is rebuilt using a "glider kit." In this circumstance, an inspector/investigator should use the model year on the engine to determine if the driver is exempt from the ELD requirements. If the engine model year is older than 2000, the driver is not subject to the ELD rule. While the driver is not required to possess documentation that confirms the vehicle engine model year, 49 CFR Part 379 Appendix A requires motor carriers to maintain all documentation on motor and engine changes at the principle place of business. If a determination cannot be made at the roadside, safety official should refer the case for further investigation.

Did this answer your question? If not, please email ELD@dot.gov or call 1-800-832-5660 for more information.

Last Updated : December 18, 2017

Related Links:

[Frequently Asked Questions \(FAQs\) - ELD Rule](#)

FMCSA Information Line

1200 New Jersey Avenue SE
Washington, DC 20590
United States

ELD@dot.gov

Phone:

[Submit Feedback >](#)

Appendix A cont'd

Externally Funded Projects by College/Department/Center, Investigator(s), Project Title, Funding Agency and Funding Amount

Civil and Environmental Engineering cont'd

PI - Daniel Badoe

- Development of Tennessee Travel Demand Model Users' Group
University of Tennessee-Knoxville (via Tennessee Dept. of Transportation)
\$10,900.00
Center: Energy

PI - L. K. Crouch

- Developing a TDOT Class S-LH (Lower Heat) PCC Mixture Specification
Tennessee Department of Transportation
\$5,000.00
Center: Energy

PI - Alfred Kalyanapu

- Development of integrated DHSVM-Flood2D-GPU modeling framework for regional-scale modeling
Oak Ridge National Laboratory
\$60,019.00
Co-PI(s): Sheikh Ghafoor, Computer Science
Center: Water
- Increasing the Resilience of Agricultural Production in the Tennessee and Cumberland River Basins through More Efficient Water Resource Use
University of Tennessee (via USDA)
\$52,685.00
Center: Water

PI - Benjamin Mohr

- **Environmental & Economic Study of Glider Kit Assemblers**
Fitzgerald Glider Kits
\$70,056.00
- Linking Diversity of Polyphosphate Accumulating Organisms to Improved Functional Stability of the Enhanced Biological Phosphorus Removal Process
National Science Foundation
\$45,996.00
Co-PI(s): Tania Datta, Grace McMillan, Civil and Environmental Engineering
Center: Water

PI - Daniel VandenBerge

- Phase 1 with Luna Innovations: real-time distributed sensing of subsurface in situ stress
Luna Innovations
\$20,207.00
Center: Energy

Grants Awarded Report

From: 9/1/16 to 9/30/16

Project Title: The Origin, Host and Geographic Range of Snake Fungal Disease with an Emphasis on Species of Greatest Conservation Need in Tennessee

Agency: Tennessee Wildlife Resources Agency

Activation Amount: \$6,200.00

Personnel:

PI - Donald Walker

Abstract:

Project Title: Environmental & Economic Study of Glider Kit Assemblers

Agency: Fitzgerald Glider Kits

Activation Amount: \$12,500.00

Personnel:

PI - Benjamin Mohr

Abstract:

This research will address the environmental and economic impact of Glider Kit Assemblers in the United States marketplace and current challenges that EPA Standards/Laws plan to impose on new OEM and/or Re-manufactured Light Heavy Duty Trucks (Glider Kits) assemblers. The three key areas of research include: 1) glider kit compliance with existing and proposed EPA regulation challenges while establishing a matrix of re-manufactured components and emissions of comparable engine choices; 2) high level environmental footprint and economic study of OEM manufacturing versus assembly of re-manufactured components; and 3) industry optimization plan to address future environmental regulations including but not limited to production vehicles, component assembly, and facility compliance.

Project Title: Fulbright-Hays: Implementation of the Clinical Immersion at Disciplinary Interfaces Course

Agency: U.S. Department of State

Activation Amount: \$67,650.00

Personnel:

PI - Melissa Geist

Co-PI - Robby Sanders

Abstract:

Faculty from Chemical Engineering and Nursing at Tennessee Technological University (TTU) created a course for interdisciplinary clinical immersion in health care settings. The course design challenges interdisciplinary teams to identify problems in health care facilities, generate solutions in a reiterative process, build prototypes, and develop a plan for tech transfer and commercialization. The course has received funding from VentureWell and the Lemelson Foundation and from TTU's Creative Inquiry Grant Program. The goal of this grant proposal would be to collaborate with faculty from CUJAE to offer a similar interdisciplinary and cross-cultural course aimed at improving the lives of citizens in both countries.

(b) (5) DPP



Time 2:00 PM – 2:30 PM
Subject Briefing re: Meeting with Tommy Fitzgerald
Location Administrator's Office
Show Time As Busy
Handling: Ryan Jackson

Attendees	Name <E-mail>	Attendance
	(b)(6) Pruitt Cal. Acct. <(b)(6) Pruitt Cal. Acct.>	Organizer
	Brown, Byron <brown.byron@epa.gov>	Required

Time 2:15 PM – 2:45 PM
Subject Meeting with Tommy Fitzgerald
Location Adminsitrator's office
Show Time As Busy
Topic: GHG phase 2 sale and assembly of Gilder Kits; goes into effect in Jan of next year and will put out hundreds of jobs

Attendees: Tommy C. Fitzgerald, Tommy A. Fitzgerald (Jr.), Joe DePew , Don Shandy

POC (b)(6) Tommy C. Fitzgerald email <mailto:(b)(6) Tommy C. Fitzgerald email (b) (6)>

Attendees	Name <E-mail>	Attendance
	(b)(6) Pruitt Cal. Acct. <(b)(6) Pruitt Cal. Acct.>	Organizer
	Jackson, Ryan <jackson.ryan@epa.gov>	Required
	Brown, Byron <brown.byron@epa.gov>	Required
	Eric Vance (Vance.Eric@epa.gov) <Vance.Eric@epa.gov>	Required

Time 2:45 PM – 3:00 PM
Subject Depart Office for White House
Show Time As Busy

Time (b) (5) DPP
Subject [REDACTED]

RECEIVED

July 10, 2017

2017 JUL 11 AM 10:01

Scott Pruitt, Administrator
Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

OFFICE OF THE
EXECUTIVE SECRETARIAT

Re: Petition for Reconsideration of Application of the Final Rule Entitled
“Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and
Heavy-Duty Engines and Vehicles—Phase 2 Final Rule” to Gliders

Pursuant to 5 U.S.C. § 553(e) and 42 U.S.C. § 7607(d)(7)(B), Fitzgerald Glider Kits, LLC (“Fitzgerald”), Harrison Truck Centers, Inc. (“Harrison”), and Indiana Phoenix, Inc. (“Indiana Phoenix”) (collectively, “Petitioners”), on behalf of the glider industry, hereby request that the Environmental Protection Agency (“EPA”) reconsider the application of the final rule entitled “Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles—Phase 2 Final Rule,” 81 Fed. Reg. 73,478 (Oct. 25, 2016) (“Phase 2 Rule”), to “gliders.”¹

Background

“Gliders” are medium- and heavy-duty trucks that are assembled by combining certain new truck parts (that together constitute a “glider kit”) with the refurbished powertrain—the engine, the transmission, and typically the rear axle—of an older truck. The glider kit generally includes the tractor chassis with frame, front axle, cab, and brakes. 81 Fed. Reg. at 73,512. A glider is manufactured by combining the powertrain from the used vehicle with the parts in the glider kit.

Gliders are approximately 25% less expensive than new trucks, a significant cost savings for small businesses and owner-operators. Env’tl. Prot. Agency & Dep’t of Transp., Response to Comments for Joint Rulemaking (“RTC”), at 1846 (Aug. 2016) (comment of GATR Truck Center). Businesses and drivers that cannot afford a new truck often purchase gliders as an alternative to continuing to drive their older vehicle. *Id.* at 1825 (comment of Clarke Power Services). Glider kits can also extend the working life of a damaged vehicle. *Id.* Gliders also require less maintenance, yielding less downtime, and have modern safety features and amenities. *Id.* Overall, they offer a more economical option for smaller fleets and owner-operators to maintain the reliability of their commercial trucking operations.

In the Phase 2 Rule published October 25, 2016, EPA for the first time mandated that glider kits, glider vehicles, and rebuilt engines installed in gliders (hereinafter “gliders”) satisfy

¹ The Phase 2 Rule was jointly promulgated by EPA and the National Highway Traffic Safety Administration (“NHTSA”), an agency within the Department of Transportation (“DOT”). Because Petitioners request reconsideration of only certain elements of the Phase 2 Rule that were promulgated pursuant to EPA’s Clean Air Act authority, this Petition is directed to EPA, and not NHTSA or DOT.

emissions standards applicable to new motor vehicles and new motor vehicle engines. The regulations accomplish this by ignoring the age of the engine and other powertrain elements installed in gliders and applying instead emissions standards based on the “calendar year in which assembly of the glider is completed.” 81 Fed. Reg. at 73,943; *see* 40 C.F.R. § 1037.635. In other words, if a glider assembler installs a reclaimed engine in a glider in 2017, that engine must be certified to comply with all emissions standards applicable to new engines from model year 2017, regardless of the actual model year of the engine. “This requirement applies to all pollutants, and thus encompasses criteria pollutant standards as well as the separate [greenhouse gas (“GHG”)] standards.” 81 Fed. Reg. at 73,943; *see* 40 C.F.R. § 1037.635.

Recognizing that the new standards applied to gliders in the Phase 2 Rule were both sudden and onerous, the Phase 2 Rule purports to provide some “transitional flexibilities,” 81 Fed. Reg. at 73,942, but these provisions are not enough to prevent a devastating impact on the glider industry when the standards become almost fully applicable to gliders on January 1, 2018. In 2017, glider assemblers are permitted to produce a limited number of gliders exempt from the regulations. The number of gliders exempted in 2017 for any particular company is equivalent to the “highest annual production of glider kits and glider vehicles for any year from 2010 to 2014” by the company. 40 C.F.R. § 1037.150(t)(3). Because of the growth of their business since 2014, this provision has forced Fitzgerald, Harrison, and Indiana Phoenix to scale back production in 2017 to a certain degree, but it has allowed for continued operation. Beginning January 1, 2018, however, the 2017 regime is replaced with an allowance to build only 300 gliders per year that are exempt from the regulations. *Id.* § 1037.105(t)(1)(ii). This stringent production cap would effectively destroy the glider industry.²

Despite EPA’s stated goal to reduce greenhouse gas emissions, EPA did not perform any actual testing to analyze the environmental impact of remanufactured engines and gliders compared to new Original Equipment Manufacturer (“OEM”) vehicles. Instead, it relied on unsubstantiated assumptions about the number of older engines used in gliders and the emissions from engines used in gliders.

If left in place, the Phase 2 Rule would significantly curtail American manufacturing and effectively shut down the glider industry and the nearly 20,000 jobs it supports across the nation. For example, Fitzgerald, which is based out of Tennessee and Kentucky, is currently responsible for 1,600 direct and indirect jobs in those two states alone and several thousand more associated with suppliers across the country. Yet, if this regulation goes into full effect, by the end of the year, the company will be forced to cut production and its workforce by 90%. Harrison, based in Iowa, employs approximately 450 people, and its suppliers account for many more glider-related jobs. Indiana Phoenix, based in Indiana, directly employs over a 100 people in Avilla, Indiana. The Phase 2 Rule, if it takes effect, would put more job opportunities out of reach for economically challenged areas already struggling with unemployment. Additionally, it would force small businesses to buy more expensive new vehicles instead of growing their business and creating jobs.

² There are additional exceptions from the general requirement for engines from more recent model years or with relatively few miles of engine operation. *See* 40 C.F.R. §§ 1037.150(t)(2); 1037.635(c). These carve outs do not apply to the vast majority of the gliders assembled by companies like Fitzgerald and Harrison, which tend to use engines from earlier model years and that have been subjected to normal use.

Bases for Reconsideration

EPA should reconsider the application of the Phase 2 Rule to glider kits, glider vehicles, and rebuilt engines installed in gliders for three reasons: (1) Section 202(a) of the Clean Air Act does not authorize EPA to regulate gliders; (2) EPA's prior decision to regulate gliders was based on unsupported assumptions rather than data; and (3) reconsideration is warranted under Executive Order 13783.

1. Section 202(a) of the Clean Air Act Does Not Authorize EPA to Regulate Gliders

The Phase 2 Rule relied on EPA's authority under section 202(a) of the Clean Air Act to regulate emissions from "new motor vehicles" and "new motor vehicle engines." 42 U.S.C. § 7521(a)(1). Because glider vehicles are not "new motor vehicles" and glider engines are not "new motor vehicle engines," EPA lacked authority under this provision to apply the Phase 2 Rule to gliders.

A glider is not a "new motor vehicle" because the most significant parts of the vehicle—the engine, transmission, and typically the rear axle—are not new. A vehicle is a "new motor vehicle" within the meaning of the Clean Air Act only if "equitable or legal title" to the vehicle has "never been transferred to an ultimate purchaser." 42 U.S.C. § 7550(3). For gliders, the "legal or equitable" title to the main components of the vehicle had previously "been transferred to an ultimate purchaser"—the owner of the donor truck. Simply adding new parts to a used truck does not make it a "new motor vehicle." The Phase 2 Rule's consideration of this issue was arbitrary and capricious and contrary to law. The Rule indicated first that EPA's authority could not be challenged because EPA had implicitly found gliders to be new vehicles in its Phase 1 Rule, which granted an interim exemption for gliders. 81 Fed. Reg. at 73,513-14. EPA, however, had an obligation to determine in the Phase 2 Rule that it had authority to act. *See Louisiana Pub. Serv. Comm'n v. FCC*, 476 U.S. 355, 374 (1986) ("[A]n agency literally has no power to act . . . unless and until Congress confers power upon it."); *Arlington v. FCC*, 133 S. Ct. 1863, 1880 (2013) (same). The Phase 2 Rule also erroneously based its interpretation of the Clean Air Act on marketing materials from the Fitzgerald web site. 81 Fed. Reg. at 73,514. EPA's legal authority does not turn on how a glider is described in marketing materials. EPA should reconsider this issue and conclude that because the principal parts of a glider are used, a glider is not a "new motor vehicle."

Such a conclusion would be consistent with the treatment of this issue by the National Highway Traffic Safety Administration ("NHTSA"). NHTSA's regulations make clear that a truck is not considered to be "newly manufactured" if the "engine, transmission, and drive axle(s) (as a minimum) of [an] assembled vehicle are not new" and at least two of those three components come from the same donor vehicle. 49 C.F.R. § 571.7(e). Gliders do not fall within this definition. EPA failed adequately to explain its departure from NHTSA's approach.

Moreover, "glider kits" do not even fall within the Clean Air Act's definition of "motor vehicle." Under the Act, a "motor vehicle" must be "self-propelled." 42 U.S.C. § 7550(2). But a glider kit lacks an engine, transmission, and often a rear axle. A collection of parts lacking these key components obviously is not "self-propelled." The Phase 2 Rule relies on particular

provisions authorizing regulation of specific vehicle components. 81 Fed. Reg. at 73,514; *see* 42 U.S.C. § 7521(a)(5)(A) (fueling systems); *id.* § 7521(a)(6) (onboard vapor recovery systems). But there is no provision authorizing regulation of the parts that make up a glider kit. The fact that the Clean Air Act allows EPA to regulate certain specified vehicle components, but not the components in a glider kit, undermines the Phase 2 Rule’s application to glider kits. Congress understood how to grant EPA authority to regulate vehicle components but declined to authorize regulation of glider kits. *See TRW, Inc. v. Andrews*, 534 U.S. 19, 28-29 (2001) (applying *expressio unius* canon of construction). Under the interpretation set forth in the Phase 2 Rule, there would be no limit on EPA’s authority to regulate parts of vehicles.

The Phase 2 Rule also states that EPA has authority to regulate “incomplete vehicles” and “vehicle components” under Section 202(a). *See* 81 Fed. Reg. at 73,514. It first points to language from Section 202(a)(1) stating that EPA has authority “whether such [new motor] vehicles . . . are designed as complete systems or incorporate devices to prevent or control . . . pollution.” 42 U.S.C. § 7521(a)(1). This portion of section 202(a)(1), however, merely provides that emissions standards are limited to the useful life of a vehicle or engine. *See id.* It does not purport to expand EPA’s authority in the first sentence of that section. *See id.* (“The Administrator shall by regulation prescribe (and from time to time revise) in accordance with the provisions of this section, standards applicable to the emission of any air pollutant from any class or classes of *new motor vehicles*” (emphasis added)).³

Finally, the Phase 2 Rule erred in concluding that glider engines are “new motor vehicle engines” under the Act. A “new motor vehicle engine” is defined as either (1) “an engine in a new motor vehicle,” or (2) a “motor vehicle engine the equitable or legal title to which has never been transferred to the ultimate purchaser.” 42 U.S.C. § 7550(3). Because a glider is not a new motor vehicle, a glider engine is not “an engine in a new motor vehicle.” *Id.* And because a glider engine has previously been owned, title in the engine has previously been “transferred to an ultimate purchaser.” *Id.*

For all of these reasons, Petitioners respectfully suggest that EPA reconsider its authority to regulate gliders under Section 202(a) of the Clean Air Act.

2. EPA’s Prior Decision To Regulate Gliders Was Based on Unsupported Assumptions Rather than Data

The Phase 2 Rule relied upon unsupported assumptions to arrive at the conclusion that immediate regulation of glider vehicles was warranted and necessary. First, the Phase 2 Rule assumed that *all* glider engines would be older engines from before 2002. *See* 81 Fed. Reg. at

³ The Phase 2 Rule also indicated that EPA’s authority to regulate “defeat devices” “support[ed] the actions EPA is taking [under section 202] with respect to . . . glider kits.” 81 Fed. Reg. at 73,518. There is no basis for this contention. Under the Act, a defeat device is “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 [Clean Air Act] regulations.” 42 U.S.C. § 7522(a)(3)(B) (emphasis added). But the “principal effect” of a glider kit is not to “bypass, defeat, or render inoperative” some “device” or “element of design” in a vehicle. The Rule never explained what device or element of design it thought was being defeated.

73,943 (“The modeling also assumed that these gliders emit at the level equivalent to the engines meeting the MY 1998-2001 standards”); RTC 1960-1961. EPA indicated that it believed “most glider vehicles currently being produced use remanufactured engines of this vintage,” *id.* (emphasis added), but it made no effort to quantify what percentage of glider engines in fact would fall within this category and instead assumed that *all* of them would. In fact, the model year of the engines used in glider vehicles varies depending on the donor vehicle or owner and includes engines from after 2002.

EPA also assumed that the nitrogen oxide (“NO_x”) and particulate matter (“PM”) emissions of glider vehicles using pre-2007 engines would be at least ten times higher than emissions from equivalent vehicles being produced with brand new engines. *See id.* at 73,942. But EPA relied on no actual data to support this conclusion; it simply relied on the pre-2007 standards. *Id.* A recent study by Tennessee Technological University (“Tennessee Tech”) analyzing the NO_x, PM, and carbon monoxide (“CO”) emissions from both remanufactured and OEM engines reached a contrary conclusion. *See* Exhibit 1 (Letter to the Hon. Diane Black from Philip B. Oldham, President, Tennessee Technological University, and Thomas Brewer, Associate Vice President, Center for Intelligent Mobility (June 15, 2017)). The results showed that remanufactured engines from model years between 2002 and 2007 performed roughly on par with OEM “certified” engines, and in some instances even out-performed the OEM engines. *See id.* at 1. Tennessee Tech’s research also “showed that remanufactured and OEM engines experience parallel decline in emissions efficiency with increased mileage.” *Id.* at 2. Tennessee Tech also estimated that glider vehicles would emit less than 12% of the total NO_x and PM emissions for all Class 8 heavy duty vehicles, *see id.*, not 33% as the Phase 2 Rule suggests, *see* 81 Fed. Reg. at 73,943. Tennessee Tech’s findings constitute new information, developed since the Phase 2 Rule was promulgated, and provide a basis for EPA to reconsider the existing rule pursuant to Section 307 of the Clean Air Act. 42 U.S.C. § 7607(d)(7)(B); *see* S. Rep. No. 91-1196, at 41-42 (1970) (“[N]ew information . . . may dictate a revision or modification of any promulgated standard or regulation established under the [Clean Air] act.”); *Oljato Chapter of the Navajo Tribe v. Train*, 515 F.2d 654, 660 (D.C. Cir. 1975) (same).

EPA also did not account for its own low-sulfur diesel rule. Starting in 2006, EPA required that diesel fuel refiners produce diesel fuels with a 97% lower sulfur content. *See* 40 C.F.R. §§ 80.500, 80.520. This reduction of sulfur significantly reduced the amount of NO_x, PM, and other pollutants emitted from diesel engines, including gliders and other heavy-duty truck tractors. This reduction was not taken into account in the development of the Phase 2 Rule for gliders.

The Phase 2 Rule also erroneously assumed that the only explanation for the growth of the glider vehicle market was that glider assemblers sought to avoid the increasingly restrictive emission standards for engines in new OEM tractors. 81 Fed. Reg. at 73,943. The reality is that glider vehicles do not directly compete with new OEM tractors. For most individuals or companies that purchase gliders, the choice is not between a glider or a new tractor. The choice is between a glider and continuing to run their old tractor. Further, glider vehicle assemblers often take the lead on forward-thinking research and development that benefits the entire industry, including innovative research on fuel additives, emission devices, and tire and wheel combinations in small production runs. *See* Exhibit 1, at 2. Glider assemblers are currently

testing components, light weight drive systems, alternative fuel mixtures, autonomous drive systems, light weight body materials, and intelligent transportation systems. *Id.* In short, the glider assemblers are a complementary part of the medium- and heavy-duty truck industry, not direct competitors to OEMs.

Finally, the Phase 2 Rule failed to consider the significant environmental *benefits* that glider vehicles create. Glider vehicle GHG emissions are less than those of OEM vehicles due to gliders' greater fuel efficiency, and the carbon footprint of gliders is further reduced by the savings created by recycling materials. Gliders are 20% more fuel efficient than OEM vehicles. *See id.* Moreover, gliders reuse engines and other components, instead of casting new parts. Glider assemblers reuse approximately 4,000 pounds of cast steel in the remanufacturing process, including 3,000 pounds for the engine assembly alone. *Id.* Reusing these components avoids the environmental impact of casting steel, including the significant associated NO_x emissions. *See, e.g.,* National Emission Standards for Hazardous Air Pollutants: Integrated Iron and Steel Manufacturing, 68 Fed. Reg. 27,646 (May 20, 2003); Env'tl. Prot. Agency, *Alternative Control Techniques Document – NO_x Emissions From Iron and Steel Mills*, EPA-453/R-94-065 (Sept. 1994); *see also* Exhibit 1, at 2. Given their better fuel efficiency and reuse of cast steel, gliders have a lower carbon footprint than OEM vehicles, a fact not considered in the development of the Phase 2 Rule.

In light of the new information developed by Tennessee Tech and the unsupported assumptions that form the basis for the Phase 2 Rule as it applies to gliders, EPA should reconsider the rule.


3. Reconsideration Is Warranted under Executive Order 13783

The March 28, 2017 Executive Order, “Presidential Executive Order on Promoting Energy Independence and Economic Growth,” further highlights why EPA should reconsider the Phase 2 Rule as it applies to gliders. Exec. Order No. 13,783 (Mar. 28, 2017). The Executive Order rescinds (among other things) the June 2013 report from the Executive Office of the President, titled “The President’s Climate Action Plan,” and instructs EPA and all other federal agencies to “identify existing agency actions related to or arising from” the now-rescinded plan and to “suspend, revise, or rescind, or publish for notice and comment proposed rules suspending, revising, or rescinding any such actions, as appropriate and consistent with law and with the policies set forth in section 1 of th[e] order.” *Id.* §§ 3(b), (d). The Phase 2 Rule is a direct product of the Climate Action Plan. 81 Fed. Reg. at 73,480. And reconsideration of the application of the Phase 2 Rule to gliders is consistent with the Executive Order’s stated purpose of avoiding environmental regulation that “constrain[s] economic growth” and “prevent[s] job creation” and ensuring that “environmental regulations comply with the law, are of greater benefit than cost, and are developed through transparent processes that employ the best available peer-reviewed science and economics.” Exec. Order No. 13,783 §§ 1(a), (e). Because the Phase 2 Rule is related to the rescinded Climate Action Plan, and because the portion of the Rule that applies to gliders conflicts with the policies set forth in Section 1 of the Order, EPA should reconsider the rule. Based on that reconsideration, EPA should “suspend, revise, or rescind” the Rule as applied to gliders, including, as necessary, by promulgating new regulations. *See id.* § 3(d).

Conclusion

For the foregoing reasons, Petitioners respectfully request EPA to reconsider application of the Phase 2 Rule to gliders. Given the impending January 1, 2018 compliance date, which will effectively eliminate the industry, Petitioners request that EPA complete this reconsideration as soon as possible.

Respectfully,



Fitzgerald Glider Kits, LLC
Tommy C. Fitzgerald, President



Harrison Truck Centers, Inc.
Dustin Petersen, Shareholder



Indiana Phoenix, Inc.
Dane Keener, General Manager



Office of the President

TENNESSEE TECH

June 15, 2017

The Honorable Diane Black
1131 Longworth HOB
Washington, DC 20515

Reference: Tennessee Tech University – Summary of Heavy Duty Truck Study and Evaluation of the Phase II Heavy Duty Truck Rule

Congressman Black:

From September 2016 – November 2016, the Tennessee Technological University Department of Civil and Environmental Engineering (“Tennessee Tech”) conducted the first phase of its research on the environmental and economic impact of the Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles – Phase 2 rule (“Phase 2 Rule”) published October 25, 2016. The key areas of research were to (1) Compare Glider Kit compliance with the Phase 2 Rule; (2) Perform high level environmental footprint and economic study of OEM manufacturing vs. assembly of remanufactured components (Glider Kits); and (3) Evaluate industry optimization plans to address future environmental regulations including but not limited to production vehicles, component assembly, and facility compliance.

To carry out the environmental footprint component of the research, Tennessee Tech tested thirteen heavy-duty trucks on a common chassis dynamometer at a common site; eight trucks were remanufactured engines and five were OEM “certified” engines, all with low mileage (NOTE: These Base Line Setting Phase I results were completed by testing only one Glider Kit manufacturer’s product and one OEM’s product). Each vehicle was evaluated for fuel efficiency, carbon monoxide (CO), particulate matter (PM) emissions and nitrogen oxide (NO_x). The results of the emissions test were compared with the 2010 EPA emissions standards for HDVs. Our research showed that optimized and remanufactured 2002-2007 engines and OEM “certified” engines performed equally as well and in some instances out-performed the OEM engines. (see also Appendix A for more detailed test results).

Summary Chart of Phase 1 Test Results	
Emission Standard	Result
CO	All vehicles met the standard
PM	All vehicles met the standard
NO _x	None of the vehicles met the standard

Congressman Black
June 15, 2017

While none of the vehicles met the NO_x standard, a glider remanufactured engine achieved the best result of any engine tested (see Appendix A). Further, our research showed that remanufactured and OEM engines experience parallel decline in emissions efficiency with increased mileage. Contrary to the assertion in the Phase 2 Rule, it is our estimate that the glider kit HDVs would emit less than 12% of the total NO_x and PM emissions, not 50%, for all Class 8 HDVs. Should the Phase 2 glider cap be fully implemented on January 1, 2018, there is little doubt that consumers utilizing glider vehicles, due to economic considerations, will delay purchasing new equipment and consequently, slow the reduction of engine emissions nationwide. In this regard, the Phase 2 rule is counter-productive to its stated intent.

In addition to equal or lower emissions, glider kits have a smaller carbon footprint than OEM vehicles due to fuel efficiency and recycling of materials. Comparisons between 2016 glider kit vehicles and new EPA compliant vehicles for fuel efficiency reflect that glider kits are 20% more efficient on fuel consumption. Glider vehicles also reuse engines and other components in the remanufacturing process, resulting in the reuse of approximately 4,000 pounds of cast steel. The engine assembly alone accounts for approximately 3,000 pounds of recycled cast steel. Thus, the well-documented environmental impact of casting steel, including the significant NO_x emissions, is avoided by reusing cast steel components in glider vehicles. Consequently, given the superior fuel efficiency and the reuse of cast steel, glider vehicles have a lower carbon footprint than OEMs. None of these facts were considered in the development of the Phase 2 rule.

From an economic standpoint, Tennessee Tech examined the impact of the Phase 2 Rule sales cap of 300 units for glider kits would have on the State of Tennessee. The 300 unit sales cap represents 9% of Fitzgerald's current sales. It is estimated that a 91% reduction in output by Fitzgerald would result in a direct loss of approximately 947 jobs and a loss of approximately \$512 million of economic output in the State of Tennessee alone. This impact takes into account the direct and indirect economic impact, including expenditures on labor, operations and maintenance as well as changes in the supply chain throughout the state. Additionally, on a broader scale, the economic impact of the Phase 2 Rule could easily exceed \$1 billion nationwide due to thousands of permanent job losses and supply chain interruption and reduction. The Phase 2 Rule failed to sufficiently evaluate and consider these impacts.

Finally, this phase of the research shows that trucking companies that utilize glider kit HDVs in their fleets are vigilant in maintenance and elect to optimize their fleets to maximum efficiency throughout the life span of the vehicle. Further, glider kit assemblers facilitate research and development for OEM's by conducting innovative research for fuel additives, emission devices, tire and wheel combinations in small production runs and are currently testing components, light weight drive systems, alternative fuel mixtures, autonomous drive systems, light weight body materials, and intelligent transportation systems. As a general statement, our observation is glider assemblers are in tune with industry needs and cutting edge innovation.

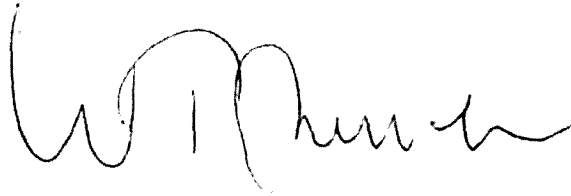
Congressman Black
June 15, 2017

Tennessee Tech will continue to evaluate HDV engines during Phase II of the research in 2017. Such effort will be conducted in conjunction with the Oak Ridge National Lab - Fuel Engines & Emissions Research Center. The goals of the next phase include development of engineering and manufacturing solutions that exceed EPA emission standards, a focused research, development, and testing plan for NO_x emissions, and to continue testing to demonstrate continuous improvement of emissions from remanufactured heavy-duty engines.

Sincerely,



Philip B. Oldham
President



Thomas Brewer
Associate Vice President
Center for Intelligent Mobility

APPENDIX A: Testing Results from Tennessee Tech Phase 1 Heavy Duty Vehicle Study

Engine	Type	CO (g/HP * hr) (2010 standard = 15.5)	PM
Detroit Diesel DD15	ReMan	0.290	BTD
Caterpillar CT13	ReMan	0.212	BTD
Detroit Diesel Series 60	ReMan	1.553	BTD
Detroit Diesel Series 60	ReMan	1.959	BTD
Detroit Diesel Series 60	ReMan	0.015	BTD
Detroit Diesel Series 60	ReMan	0.317	BTD
Detroit Diesel Series 60	ReMan	0.483	BTD
Detroit Diesel Series 60	ReMan	0.467	BTD
Detroit Diesel DD15	OEM	0.491	BTD
Detroit Diesel DD15	OEM	1.169	BTD
Detroit Diesel DD15	OEM	0.556	BTD
Detroit Diesel DD15	OEM	0.098	BTD
Detroit Diesel DD15	OEM	1.558	BTD

*BTD=below threshold detection point

** NO_x (g/HP * HP) (2010 standard = 0.2); All tested engines were higher than the standard and ranged from a low of 0.44 to a high of 6.45. The lowest tested NO_x was a Fitzgerald – Reman Detroit Diesel DD 15 using proprietary Fitzgerald engine design and set up. That same engine also tested at the 0.290 Co rate.



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EPA Intends to Roll Back Job Killing Regulation Hurting Small Business Owners

Media

[Press Releases](#)

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[Video Gallery](#)

August 17, 2017 | Press Release

Move will Save Thousands of Jobs Nationwide

Washington, D.C. – Today, the Environmental Protection Agency (EPA) announced it will change a crippling Obama-era regulation that threatens to shut down the U.S. glider kit industry. Without immediate action, the rule will devastate these small and medium-sized manufacturers, costing thousands of jobs in Tennessee alone.

Glider kits are used to refurbish wrecked or unsafe highway tractors, and are often far more cost effective for the fleets of small business owners who are unable to buy all new vehicles. Known as the "[Phase 2 Rule](#)," the Obama-era regulation would cap a manufacturer's production at 300 glider kits per year by January 2019, a small fraction of the current production level. Ending the production of these high quality, safe and efficient vehicles will result in a direct loss of approximately 20,000 jobs nationwide. On a broader scale, an [independent study](#) found that the economic impact of this rule could exceed a conservative estimate of \$1 billion nationwide.

Congressman Diane Black (R-TN-06) released the following statement:

"The Obama administration's rule not only ignores the benefits of gliders, it destroys an entire industry. To say that I am grateful for the hard work of Administrator Pruitt and his team is an understatement. Tennesseans deeply value the work ethic that those in this industry exemplify, and it is with great pride that we can count this as a victory for communities across our state. I applaud the Administrator for recognizing the harmful effects this overreaching regulation would have on thousands of families dependent on this trade as a way of life."

Following the announcement, **EPA Administrator Scott Pruitt said**, "EPA is committed to revisiting rules that may not fall under the Agency's jurisdiction and have negative impacts on businesses across the country. By revisiting these

provisions, we are allowing all stakeholders to share their concerns and the Agency to explore the full impact of these rules.”

Glider kit manufacturers such as Fitzgerald Glider Kits, Harrison Truck Centers and Indiana Phoenix, have argued that despite the previous Administration’s stated goal to reduce greenhouse gas emissions, the EPA did not perform any actual testing to analyze the environmental impact of remanufactured engines and gliders compared to new, or Original Equipment Manufacturer (“OEM”), vehicles. Instead, it relied on unsubstantiated assumptions about the number of older engines used in gliders and their emissions.

This argument was confirmed in a 2016 [study](#) by Tennessee Tech University. The study tested emissions from thirteen vehicles and concluded that remanufactured engines performed equally as well as the OEM engines when compared with the 2010 EPA emissions standards. *“This study demonstrates that the so-called data the EPA relied upon was based on unsupported assumptions rather than true science,”* **said Congressman Black.**

Impact on Glider Kit Manufacturers

In Tennessee, Fitzgerald Glider Kits was founded in 1989 by Tommy Fitzgerald Sr. and his brother, Ricky, beginning in a single bay facility located in Pall Mall. Thirty years later, the company has expanded to six counties in Tennessee, with facilities covering roughly 750,000 square feet and 500 employees in Tennessee alone.

“On behalf of my family and the terrific employees at Fitzgerald Glider Kits, I want to thank Congressman Black and Administrator Pruitt for their leadership on this issue and genuinely caring for the concerns of small businesses like ours,” **said Tommy Fitzgerald Sr.** *“There is a way to strike a rational balance between environmental concerns and jobs, but this rule is not it. The EPA’s announcement should inspire small businesses everywhere.”*

“The Fitzgerald family is very grateful for Congressman Black’s dedication and leadership on the glider issue dating back to 2015. The Congressman’s recognition of the potentially adverse impact of a misinformed rule on thousands of jobs in rural areas of the Upper Cumberland Region and the tens of thousands of jobs nationally demonstrates her commitment to helping preserve and create American jobs,” **said Fitzgerald Sr.**

The EPA’s announcement today follows voiced concerns by stakeholders and business owners, like Fitzgerald, regarding the impact these regulations would have on their industries. Congressman Black has worked alongside Fitzgerald Trucking since 2015 to ensure that the restrictions are not enforced.

“The Fitzgerald’s have the ability to bring businesses and jobs to the small, rural areas of Tennessee and have changed the lives of countless families,” **said Congressman Black.** *“It is my hope that this action by Administrator Pruitt will continue that legacy. To the Fitzgerald’s, this business is far more than making a dollar – it’s about giving back, and I am proud to stand next to them as they build on their vision.”*

Background:

Trucking operators rely on glider kits for the construction of affordable and reliable vehicles which in turn promote economic growth and job stability. A well assembled kit gives small business owners the ability to minimize maintenance downtime and provides their drivers with important safety features as they drive

across the country. The gliders lower the cost of truck ownership compared to a factory-produced vehicle, allowing small business owners to continue operating efficiently with the highest quality trucks, without the added cost of purchasing a new vehicle.

Fitzgerald Glider Kits is North America's largest Glider Kit assembler and specializes in installing re-manufactured main components of trucks into a new cab. These cabs are reliable and fuel efficient, and provide trucking businesses with a more cost-effective way of doing business. In some cases, the gliders can save 25% off the sticker price of a new truck and possess better fuel economy. The company is based in central Tennessee and produces more than 3,500 trucks per year, offering various models of household name brands. Still owned and operated by Robert Fitzgerald, Tommy Fitzgerald Jr. and associate Nick Bresaw, Fitzgerald Glider Kits has facilities in six locations across the Upper Cumberland region.

In July 2015, Congressman Black introduced and successfully passed [H. Amdt. 630](#), an amendment to *the Department of the Interior, Environment, and Related Agencies Appropriations Act* that would prohibit the EPA from applying its proposed "Phase 2 rules" on greenhouse gas emissions standard for medium and heavy duty trucks to glider kits. H. Amdt. 630 would prohibit the EPA from extending the rule to glider kits as they were wrongly labeled as "new vehicles." The amendment [passed the House](#) by voice vote.

Click [HERE](#) to view the EPA's press release.

###

Congressman Diane Black represents Tennessee's 6th Congressional District. A nurse for more than 40 years, she serves as Chairman of the House Budget Committee and a member of the Ways and Means Committee.

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We've made some changes to EPA.gov. If the information you are looking for is not here, you may be able to find it on the EPA Web Archive or the January 19, 2017 Web Snapshot.



News Releases from Headquarters

EPA Announces Intent to Revisit Provisions of Phase 2 Heavy-Duty Rules

08/17/2017

Contact Information:

press@epa.gov

WASHINGTON — The U.S. Environmental Protection Agency (EPA) announced today its intent to revisit provisions of the Phase 2 Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines following concerns raised by stakeholders in the trailer and glider industry.

“In light of the significant issues raised, the agency has decided to revisit the Phase 2 trailer and glider provisions,” said **EPA Administrator Scott Pruitt**. “We intend to initiate a rulemaking process that incorporates the latest technical data and is wholly consistent with our authority under the Clean Air Act.”

Background:

In September 2011, EPA and the National Highway Traffic Safety Administration (NHTSA) issued greenhouse gas (GHG) emissions and fuel efficiency standards for medium- and heavy-duty vehicles for model year 2014-2018 (“Phase 1”). These standards applied to newly manufactured engines, tractors, vocational vehicles, large pickups, and vans. In October 2016, EPA and NHTSA updated the standards for medium- and heavy-duty vehicles MY 2021-2027 (“Phase 2”), and regulated trailers and gliders – for the first time under the GHG program – with compliance deadlines beginning in 2018.



E. SCOTT PRUITT
ADMINISTRATOR

August 17, 2017

Mr. Tommy C. Fitzgerald
President
Fitzgerald Glider Kits
1225 Livingston Highway
Birdstown, Tennessee 38549

Dear Mr. Fitzgerald:

Thank you for your letter of July 10, 2017, requesting that the U.S. Environmental Protection Agency reconsider the requirements for gliders under the final rule titled *Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles – Phase 2* (81 FR 73478, October 25, 2016) (*Phase 2 Rule*). Your letter raises significant questions regarding the EPA's authority under the Clean Air Act to regulate gliders as well as the soundness of the EPA's technical analysis used to support the requirements.

More specifically, your letter states that the EPA lacks authority over glider *vehicles* because they are not "new" motor vehicles and glider *kits* because they do not fall within the Clean Air Act's definition of "motor vehicle." In addition, it also raises concerns that the EPA relied upon "unsupported assumptions rather than data" with regard to the emission impacts of glider vehicles.

In light of these issues, the EPA has decided to revisit the provisions in the *Phase 2 Rule* that relate to gliders. We intend to develop and issue a Federal Register notice of proposed rulemaking on this matter, consistent with the requirements of the Clean Air Act.

If you have any questions regarding this response, you may contact Bill Charmley in the Office of Transportation and Air Quality at (734) 214-4466.

Respectfully yours,



E. Scott Pruitt



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
NATIONAL VEHICLE AND FUEL EMISSIONS LABORATORY
2565 PLYMOUTH ROAD
ANN ARBOR, MICHIGAN 48105-2498

OFFICE OF
AIR AND RADIATION

MEMORANDUM

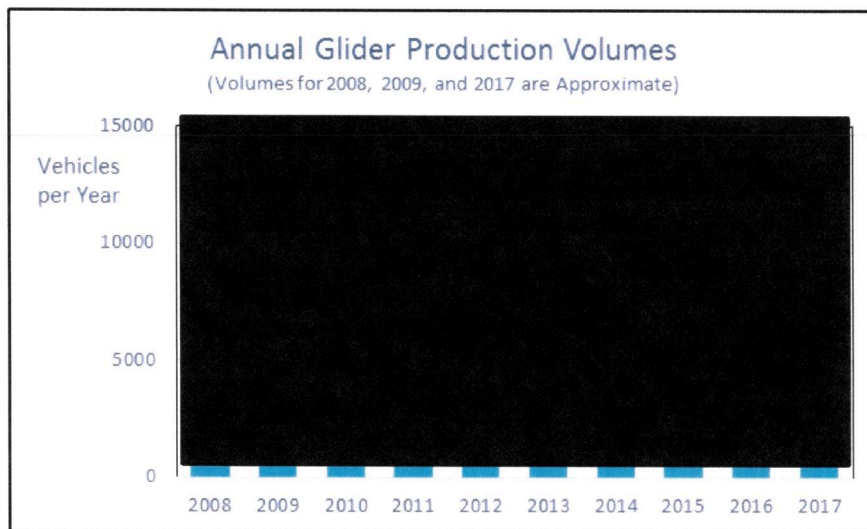
To: William Charmley
From: Charles Moulis
Date: November 15, 2017
Re: Summary of Glider Production Data

**REDACTED
VERSION**

As you know, we recently received glider kit production data from Daimler Trucks North America (DTNA) and PACCAR – the primary suppliers of glider kits. This memorandum summarizes the data which are attached. Please note that both DTNA and PACCAR identified the data as confidential business information (CBI) under 40 CFR part 2.

As you can see from Figure 1, prior to 2010, estimated glider kit production volumes are less than 1,000 vehicles per year.¹ [REDACTED]

Figure 1 - Summary of Data



The data also show that glider production increased steadily from 2010 until reaching a peak of significantly over 10,000 gliders in 2015 – an order of magnitude change from 2010. Glider production dropped in 2016, coinciding with overall drop in the production and sale of all Class 8 trucks that year.

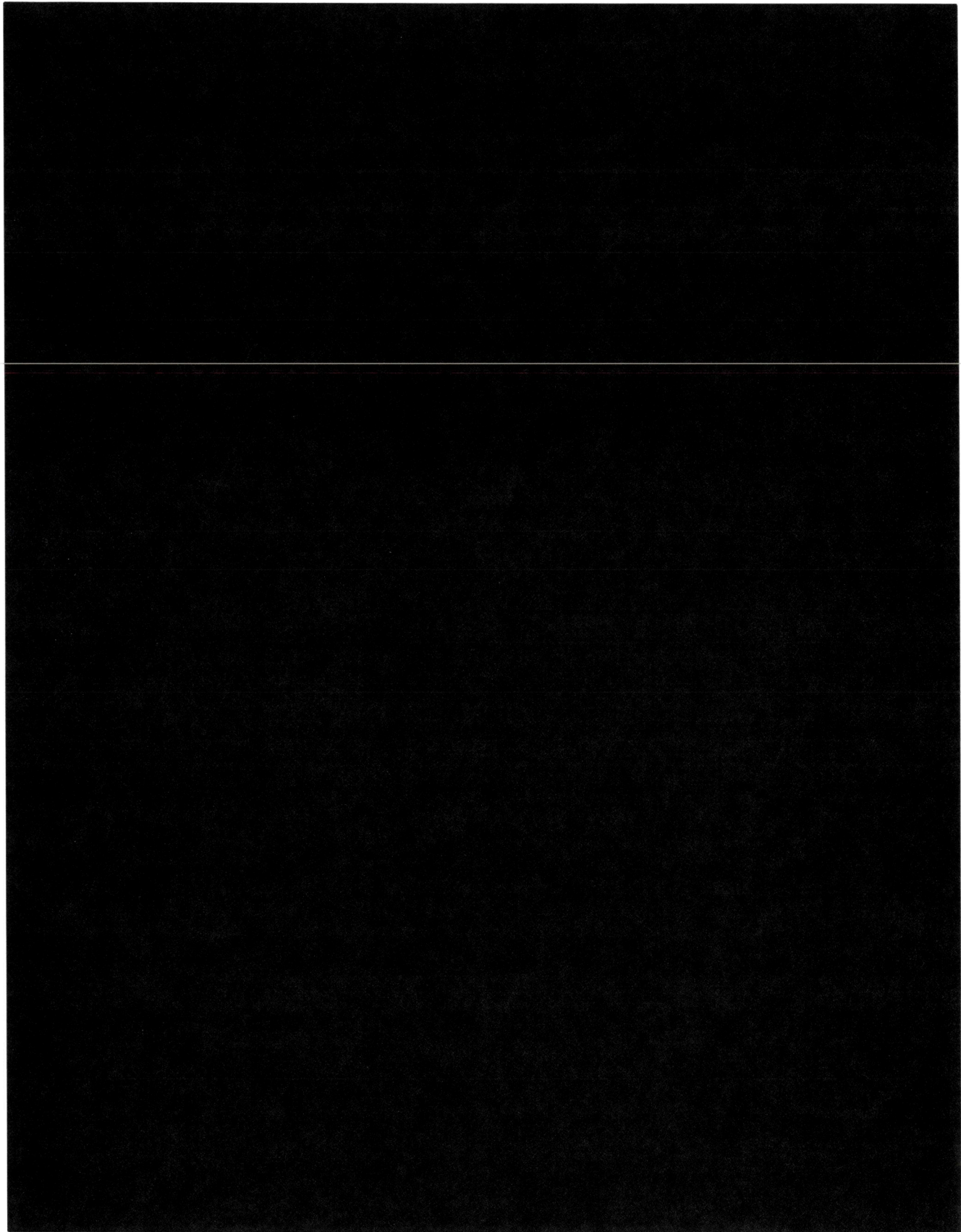
Because the 2017 production year is not yet complete, we projected the annual volume to be equal to the 2014 volume, which is the maximum amount allowed by the regulations. Actual production volume may be slightly less than this. However, the incomplete data provided indicate any such difference will be small.

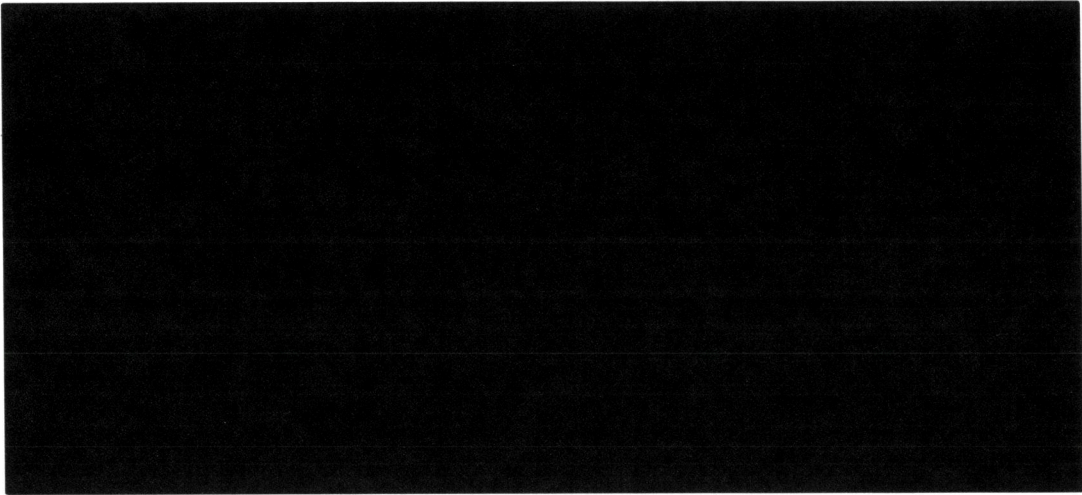
Both DTNA and PACCAR provided additional information along with their overall glider kit production volumes. Some of this information is shown in Tables 1 through 3. EPA also received production information from small glider assemblers in their requests for exemption under 40 CFR 1037.150. Table 4 shows the production and sales data provided to EPA for the largest independent glider assembler. Taken together, these data support the following observations:

- The vast majority of glider vehicles being produced currently are tractors.
- Prior to 2010, no independent glider assembler produced 300 or more glider vehicles per year.
- Nearly all engines for recent glider production are 1998-2002 pre-EGR engines. There are a small but significant number of 2004-2006 engines used, but very few 2007 and later engines.
- A majority of glider vehicles are being produced by a small number of companies.
- In 2016, there were hundreds more assemblers that produced 10 or fewer gliders per year. It appears that most of these assemblers qualify as small businesses. However, it is not clear what fraction of these assemblers produce gliders for resale rather than their own use.

[REDACTED]

Thus, we cannot precisely quantify how many post-2002 engines are used in gliders or how many companies will be impacted by the 300 cap. However, both DTNA and PACCAR have seen the observations noted above, and neither objected to them as being inconsistent with their understanding of the market.





Clerk of the House of Representatives
Legislative Resource Center
B-106 Cannon Building
Washington, DC 20515
<http://lobbyingdisclosure.house.gov>

Secretary of the Senate
Office of Public Records
232 Hart Building
Washington, DC 20510
<http://www.senate.gov/lobby>

LOBBYING REGISTRATION

Lobbying Disclosure Act of 1995 (Section 4)

Check One: New Registrant New Client for Existing Registrant Amendment

1. Effective Date of Registration 9/29/2017
Senate Identification 401104591

2. House Identification 43786

REGISTRANT Organization/Lobbying Firm Self Employed Individual

3. Registrant Organization FITZGERALD PETERBILT

Address 33392 Lee Hwy Address2
City Glade Spring State VA Zip 24340 Country USA

4. Principal place of business (if different than line 3)

City _____ State _____ Zip _____ Country _____

5. Contact name and telephone number

Contact Mr. Jon Toomey Telephone 2029998880 E-mail jtoomey@fitzgeraldtrucksales.com
International Number

6. General description of registrant's business or activities

Manufacturing

CLIENT *A Lobbying Firm is required to file a separate registration for each client. Organizations employing in-house lobbyists should check the box labeled "Self" and proceed to line 10.* **Self**

7. Client name FITZGERALD PETERBILT

Address
City _____ State _____ Zip _____ Country USA

8. Principal place of business (if different than line 7)

City _____ State _____ Zip _____ Country _____

9. General description of client's business or activities

LOBBYISTS

10. Name of each individual who has acted or is expected to act as a lobbyist for the client identified on line 7. If any person listed in this section has served as a "covered executive branch official" or "covered legislative branch official" within twenty years of first acting as a lobbyist for the client, *state the executive and/or legislative position(s) in which the person served.*

Name			Covered Official Position (if applicable)
First	Last	Suffix	
Jon	Toomey		

LOBBYING ISSUES

11. General lobbying issue areas (Select all applicable codes).

TAX TRD BUD TRA TRU CAW

12. Specific lobbying issues (current and anticipated)

26 U.S.C. 4051 excise taxes and exemption 4052(f)(1), Senate FSGG report language clarifying 4052(f)(1), technical barriers to trade issue affecting importation of gliders into Canada, clean air act and its inclusion of glider kits

AFFILIATED ORGANIZATIONS

13. Is there an entity other than the client that contributes more than \$5,000 to the lobbying activities of the registrant in a quarterly period and either actively participates in and/or in whole or in major part supervises, plans, or controls the registrant's lobbying activities?

No --> Go to line 14.

Yes --> Complete the rest of this section for each entity matching the criteria above, then proceed to line 14.

Internet
Address:

Name	Street	Address	Principal Place of Business
	City	State/Province Zip Code	Country

FOREIGN ENTITIES

14. Is there any foreign entity

- a) holds at least 20% equitable ownership in the client or any organization identified on line 13; or
- b) directly or indirectly, in whole or in major part, plans, supervises, controls, directs, finances or subsidizes activities of the client or any organization identified on line 13; or
- c) is an affiliate of the client or any organization identified on line 13 and has a direct interest in the outcome of the lobbying activity?

No --> Sign and date the registration.

Yes --> Complete the rest of this section for each entity matching the criteria above, then sign the registration.

Name	Street	Address	Principal place of business	Amount of contribution	Ownership
	City	State/Province Country	(city and state or country)	for lobbying activities	

Signature Digitally Signed By: Jon Toomey

Date 10/13/2017
1:48:39 PM

Contributions from Accounts Tied to Fitzgerald Gilder, Related Companies and Family Members

Amount	Date	Election Year	Recipient Name	Contributor Name
\$4,000.00	10/2/2017	2018	BLACK, DIANE	FITZGERALD GLIDER KITS LLC
\$4,000.00	10/2/2017	2018	BLACK, DIANE	FITZGERALD GLIDER KITS LLC
\$11,800.00	10/2/2017	2018	BLACK, DIANE	FITZGERALD INDUSTRIES PAC
\$11,700.00	10/2/2017	2018	BLACK, DIANE	FITZGERALD INDUSTRIES PAC
\$4,000.00	11/1/2017	2018	BLACK, DIANE	FITZGERALD PETERBILT I LLC
\$4,000.00	11/1/2017	2018	BLACK, DIANE	FITZGERALD PETERBILT I LLC
\$4,000.00	11/1/2017	2018	BLACK, DIANE	FITZGERALD PETERBILT II LLC
\$4,000.00	11/1/2017	2018	BLACK, DIANE	FITZGERALD PETERBILT II LLC
\$4,000.00	11/1/2017	2018	BLACK, DIANE	FITZGERALD PETERBILT III LLC
\$4,000.00	11/1/2017	2018	BLACK, DIANE	FITZGERALD PETERBILT III LLC
\$4,000.00	11/1/2017	2018	BLACK, DIANE	FITZGERALD PETERBILT IV LLC
\$4,000.00	11/1/2017	2018	BLACK, DIANE	FITZGERALD PETERBILT IV LLC
\$11,800.00	10/2/2017	2018	BLACK, DIANE	FITZGERALD PETERBILT PAC
\$11,700.00	10/2/2017	2018	BLACK, DIANE	FITZGERALD PETERBILT PAC
\$4,000.00	11/1/2017	2018	BLACK, DIANE	FITZGERALD PETERBILT V LLC
\$4,000.00	11/1/2017	2018	BLACK, DIANE	FITZGERALD PETERBILT V LLC
\$4,000.00	10/2/2017	2018	BLACK, DIANE	FITZGERALD PROPERTIES
\$4,000.00	10/2/2017	2018	BLACK, DIANE	FITZGERALD PROPERTIES
\$4,000.00	11/1/2017	2018	BLACK, DIANE	FITZGERALD TRAILER SALES LLC
\$4,000.00	11/1/2017	2018	BLACK, DIANE	FITZGERALD TRAILER SALES LLC
\$4,000.00	10/2/2017	2018	BLACK, DIANE	FITZGERALD TRUCK PARTS & SALES LLC
\$4,000.00	10/2/2017	2018	BLACK, DIANE	FITZGERALD TRUCK PARTS & SALES LLC
\$4,000.00	10/2/2017	2018	BLACK, DIANE	FITZGERALD TRUCK PARTS ONLINE LLC
\$4,000.00	10/2/2017	2018	BLACK, DIANE	FITZGERALD TRUCK PARTS ONLINE LLC
\$4,000.00	11/14/2017	2018	BLACK, DIANE	FITZGERALD, AMANDA
\$4,000.00	11/14/2017	2018	BLACK, DIANE	FITZGERALD, AMANDA
\$4,000.00	11/14/2017	2018	BLACK, DIANE	FITZGERALD, JAMES ADAM
\$4,000.00	11/14/2017	2018	BLACK, DIANE	FITZGERALD, JAMES ADAM
\$4,000.00	11/1/2017	2018	BLACK, DIANE	FITZGERALD, JESSICA L
\$4,000.00	11/1/2017	2018	BLACK, DIANE	FITZGERALD, JESSICA L
\$4,000.00	11/14/2017	2018	BLACK, DIANE	FITZGERALD, RICKY

\$4,000.00	11/14/2017	2018 BLACK, DIANE	FITZGERALD, RICKY
\$4,000.00	11/1/2017	2018 BLACK, DIANE	FITZGERALD, TOMMY A
\$4,000.00	11/1/2017	2018 BLACK, DIANE	FITZGERALD, TOMMY A
\$4,000.00	10/2/2017	2018 BLACK, DIANE	FITZGERALD, TOMMY C
\$4,000.00	10/2/2017	2018 BLACK, DIANE	FITZGERALD, TOMMY C
\$4,000.00	10/2/2017	2018 BLACK, DIANE	FSR SERVICE LLC
\$4,000.00	10/2/2017	2018 BLACK, DIANE	FSR SERVICE LLC
\$4,000.00	11/14/2017	2018 BLACK, DIANE	GUNTER, CARRIE L
\$4,000.00	11/14/2017	2018 BLACK, DIANE	GUNTER, CARRIE L
\$1,000.00	10/31/2017	2018 BLACK, DIANE	BOURKE, JIM
\$4,000.00	11/14/2017	2018 BLACK, DIANE	BRESAW, KATHERINE
\$4,000.00	11/14/2017	2018 BLACK, DIANE	BRESAW, NICK
\$4,000.00	11/14/2017	2018 BLACK, DIANE	DEPEW, JENNIFER
\$4,000.00	11/14/2017	2018 BLACK, DIANE	DEPEW, JENNIFER
\$4,000.00	10/2/2017	2018 BLACK, DIANE	DEPEW, JOSEPH M
\$4,000.00	10/2/2017	2018 BLACK, DIANE	DEPEW, JOSEPH M

States Coast Guard, and local or state law enforcement vessels, are prohibited from entering the restricted area without permission from the USAF 81st Security Forces Anti-Terrorism Office, KAFB or its authorized representative.

(2) The restricted area is in effect twenty-four hours per day and seven days a week (24/7).

(3) Should warranted access into the restricted navigation area be needed, all entities are required to contact the USAF 81st Security Forces Anti-Terrorism Office, KAFB, Biloxi, Mississippi, or its authorized representative.

(c) **Enforcement.** The regulation in this section shall be enforced by the USAF 81st Security Forces Anti-Terrorism Office, KAFB and/or such agencies or persons as that office may designate.

Dated: November 9, 2017.

Thomas P. Smith,

Chief, Operations and Regulatory Division,
Directorate of Civil Works.

[FR Doc. 2017-24892 Filed 11-15-17; 8:45 am]

BILLING CODE 3720-58-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 1037 and 1068

[EPA-HQ-OAR-2014-0827; FRL-9970-61-OAR]

RIN 2060-AT79

Repeal of Emission Requirements for Glider Vehicles, Glider Engines, and Glider Kits

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing to repeal the emission standards and other requirements for heavy-duty glider vehicles, glider engines, and glider kits based on a proposed interpretation of the Clean Air Act (CAA) under which

glider vehicles would be found not to constitute “new motor vehicles” within the meaning of CAA section 216(3), glider engines would be found not to constitute “new motor vehicle engines” within the meaning of CAA section 216(3), and glider kits would not be treated as “incomplete” new motor vehicles. Under this proposed interpretation, EPA would lack authority to regulate glider vehicles, glider engines, and glider kits under CAA section 202(a)(1).

DATES:

Comments: Comments on all aspects of this proposal must be received on or before January 5, 2018.

Public Hearing: EPA will hold a public hearing on Monday, December 4, 2017. The hearing will be held at EPA’s Washington, DC campus located at 1201 Constitution Avenue NW., Washington, DC. The hearing will start at 10:00 a.m. local time and continue until everyone has had a chance to speak. More details concerning the hearing can be found at <https://www.epa.gov/regulations-emissions-vehicles-and-engines/regulations-greenhouse-gas-emissions-commercial-trucks>.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA-HQ-OAR-2014-0827, at <http://www.regulations.gov>. Follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from *Regulations.gov*. The EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (*i.e.*, on the Web, cloud, or

other file sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit <http://www.epa.gov/dockets/commenting-epa-dockets>.

Docket: All documents in the docket are listed on the www.regulations.gov Web site. Although listed in the index, some information is not publicly available, *e.g.*, confidential business information or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically through www.regulations.gov or in hard copy at the following location:

Air and Radiation Docket and Information Center, EPA Docket Center, EPA/DC, EPA WJC West Building, 1301 Constitution Ave. NW., Room 3334, Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566-1744, and the telephone number for the Air Docket is (202) 566-1742.

FOR FURTHER INFORMATION CONTACT: Julia MacAllister, Office of Transportation and Air Quality, Assessment and Standards Division, Environmental Protection Agency, 2000 Traverwood Drive, Ann Arbor, MI 48105; telephone number: 734-214-4131; email address: hearing_registration-asd@epa.gov.

SUPPLEMENTARY INFORMATION:

Does this action apply to me?

This action relates to a previously promulgated final rule that affects companies that manufacture, sell, or import into the United States glider vehicles. Proposed categories and entities that might be affected include the following:

Category	NAICS code ^a	Examples of potentially affected entities
Industry	336110, 336111, 336112, 333618, 336120, 441310.	Motor Vehicle Manufacturers, Engine Manufacturers, Engine Parts Manufacturers, Truck Manufacturers, Automotive Parts and Accessories Dealers.

Note: ^a North American Industry Classification System (NAICS).

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely covered by these rules. This table lists the types of entities that we are aware may be regulated by this action. Other

types of entities not listed in the table could also be regulated. To determine whether your activities are regulated by this action, you should carefully examine the applicability criteria in the referenced regulations. You may direct

questions regarding the applicability of this action to the persons listed in the preceding **FOR FURTHER INFORMATION CONTACT** section.

I. Introduction

The basis for the proposed repeal of those provisions of the final rule entitled Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles—Phase 2 (the Phase 2 rule)¹ that apply to glider vehicles, glider engines, and glider kits is EPA's proposed interpretation of CAA section 202(a)(1) and sections 216(2) and 216(3), which is discussed below. Under this proposed interpretation: (1) Glider vehicles would not be treated as "new motor vehicles," (2) glider engines would not be treated as "new motor vehicle engines," and (3) glider kits would not be treated as "incomplete" new motor vehicles. Based on this proposed interpretation, EPA would lack authority to regulate glider vehicles, glider engines, and glider kits under CAA section 202(a)(1).

This proposed interpretation is a departure from the position taken by EPA in the Phase 2 rule. There, EPA interpreted the statutory definitions of "new motor vehicle" and "new motor vehicle engines" in CAA section 216(3) as including glider vehicles and glider engines, respectively. The proposed interpretation also departs from EPA's position in the Phase 2 rule that CAA section 202(a)(1) authorizes the Agency to treat glider kits as "incomplete" new motor vehicles.

It is settled law that EPA has inherent authority to reconsider, revise, or repeal past decisions to the extent permitted by law so long as the Agency provides a reasoned explanation. This authority exists in part because EPA's interpretations of the statutes it administers "are not carved in stone." *Chevron U.S.A. Inc. v. NRDC, Inc.* 467 U.S. 837, 863 (1984). If an agency is to "engage in informed rulemaking," it "must consider varying interpretations and the wisdom of its policy on a continuing basis." *Id.* at 863–64. This is true when, as is the case here, review is undertaken "in response to . . . a change in administration." *National Cable & Telecommunications Ass'n v. Brand X Internet Services*, 545 U.S. 967, 981 (2005). A "change in administration brought about by the people casting their votes is a perfectly reasonable basis for an executive agency's reappraisal of the costs and benefits of its programs and regulations," and so long as an agency "remains within the bounds established by Congress," the agency "is entitled to assess administrative records and evaluate priorities in light of the philosophy of the administration." *Motor Vehicle*

Manufacturers Ass'n. v. State Farm Mutual Automobile Insurance Co., 463 U.S. 29, 59 (1983) (Rehnquist, J., concurring in part and dissenting in part).

After reconsidering the statutory language, EPA proposes to adopt a reading of the relevant provisions of the CAA under which the Agency would lack authority under CAA section 202(a)(1) to impose requirements on glider vehicles, glider engines, and glider kits and therefore proposes to remove the relevant rule provisions. At the same time, under CAA section 202(a)(3)(D), EPA is authorized to "prescribe requirements to control" the "practice of rebuilding heavy-duty engines," including "standards applicable to emissions from any rebuilt heavy-duty engines." 42 U.S.C. 7521(a)(3)(D).² If the interpretation being proposed here were to be finalized, EPA's authority to address heavy-duty engine rebuilding practices under CAA section 202(a)(3)(D) would not be affected.

II. Background

A. Factual Context

A glider vehicle (sometimes referred to simply as a "glider") is a truck that utilizes a previously owned powertrain (including the engine, the transmission, and usually the rear axle) but which has new body parts. When these new body parts (which generally include the tractor chassis with frame, front axle, brakes, and cab) are put together to form the "shell" of a truck, the assemblage of parts is referred to collectively as a "glider kit." The final manufacturer of the glider vehicle, *i.e.*, the entity that takes the assembled glider kit and combines it with the used powertrain salvaged from a "donor" truck, is typically a different manufacturer than the original manufacturer of the glider kit. See 81 FR 73512–13 (October 25, 2016).

B. Statutory and Regulatory Context

Section 202(a)(1) of the CAA directs that EPA "shall by regulation prescribe," in "accordance with the provisions" of section 202, "standards applicable to the emission of any air pollutant from any . . . new motor vehicles or new motor vehicle engines." 42 U.S.C. 7521(a)(1). CAA section 216(2) defines "motor vehicle" to mean "any self-propelled vehicle designed for

transporting persons or property on a street or highway." 42 U.S.C. 7550(2). A "new motor vehicle" is defined in CAA section 216(3) to mean, as is relevant here, a "motor vehicle the equitable or legal title to which has never been transferred to an ultimate purchaser." 42 U.S.C. 7550(3) (emphasis added). A "new motor vehicle engine" is similarly defined as an "engine in a new motor vehicle" or a "motor vehicle engine the equitable or legal title to which has never been transferred to the ultimate purchaser." *Id.*³

Comments submitted to EPA during the Phase 2 rulemaking stated that gliders are approximately 25% less expensive than new trucks,⁴ which makes them popular with small businesses and owner-operators.⁵ In contrast to an older vehicle, a glider requires less maintenance and yields less downtime.⁶ A glider has the same braking, lane drift devices, dynamic cruise control, and blind spot detection devices that are found on current model year heavy-duty trucks, making it a safer vehicle to operate, compared to the older truck that it is replacing.⁷

Some commenters questioned EPA's authority to regulate glider vehicles as "new motor vehicles," to treat glider engines as "new motor vehicle engines," or to impose requirements on glider kits. Commenters also pointed out what they described as the overall environmental benefits of gliders. For instance, one commenter stated that "rebuilding an engine and transmission uses 85% less energy than manufacturing them new."⁸ Another commenter noted that the use of glider vehicles "improves utilization and reduces the number of trucks required to haul the same tonnage of freight."⁹ This same commenter further asserted that glider vehicles utilizing "newly rebuilt engines" produce less "particulate, NO_x, and GHG emissions

³ The definitions of both "new motor vehicle" and "new motor vehicle engine" are contained in the same paragraph (3), reflecting the fact that "[w]henver the statute refers to 'new motor vehicle' the phrase is followed by 'or new motor vehicle engine.'" See *Motor and Equipment Manufacturers Ass'n v. EPA*, 627 F.2d 1095, 1102 n.5 (D.C. Cir. 1979). As Title II currently reads, the term "new motor vehicle" appears some 32 times, and in all but two instances, the term is accompanied by "new motor vehicle engine," indicating that, at the inception of Title II, Congress understood that the regulation of engines was essential to control emissions from "motor vehicles."

⁴ Response to Comments for Joint Rulemaking, EPA-426-R-16-901 (August 2016) at 1846.

⁵ EPA-HQ-OAR-2014-0827-1964.

⁶ EPA-HQ-OAR-2014-0827-1005.

⁷ *Id.*

⁸ EPA-HQ-OAR-2014-0827-1964.

⁹ EPA-HQ-OAR-2014-0827-1005.

¹ 81 FR 73478 (October 25, 2016).

² EPA has adopted regulations that address engine rebuilding practices. See, e.g., 40 CFR 1068.120. EPA is not proposing in this action to adopt additional regulatory requirements pursuant to 42 U.S.C. 7521(a)(3)(D) that would apply to rebuilt engines installed in glider vehicles.

. . . compared to [a] worn oil burning engine which is beyond its useful life.”¹⁰

In the Phase 2 rule, EPA found that it was “reasonable” to consider glider vehicles to be “new motor vehicles” under the definition in CAA section 216(3). See 81 FR 73514 (October 25, 2016). Likewise, EPA found that the previously owned engines utilized by glider vehicles should be considered to be “new motor vehicle engines” within the statutory definition. Based on these interpretations, EPA determined that it had authority under CAA section 202(a) to subject glider vehicles and glider engines to the requirements of the Phase 2 rule. As for glider kits, EPA found that if glider vehicles are new motor vehicles, then the Agency was authorized to regulate glider kits as “incomplete” new motor vehicles. *Id.*

C. Petition for Reconsideration

Following promulgation of the Phase 2 rule, EPA received from representatives of the glider industry a joint petition requesting that the Agency reconsider the application of the Phase 2 rule to glider vehicles, glider engines, and glider kits.¹¹ The petitioners made three principal arguments in support of their petition. First, they argued that EPA is not authorized by CAA section 202(a)(1) to regulate glider kits, glider vehicles, or glider engines. Petition at 3–4. Second, the petitioners contended that in the Phase 2 rule EPA “relied upon unsupported assumptions to arrive at the conclusion that immediate regulation of glider vehicles was warranted and necessary.” *Id.* at 4. Third, the petitioners asserted that reconsideration was warranted under Executive Order 13783. *Id.* at 6.

The petitioners took particular issue with what they characterized as EPA’s having “assumed that the nitrogen oxide (‘NO_x’) and particulate matter (‘PM’) emissions of glider vehicles using pre-2007 engines” would be “at least ten times higher than emissions from equivalent vehicles being produced with brand new engines.” Petition at 5, citing 81 FR 73942. According to the petitioners, EPA had “relied on no actual data to support this conclusion,” but had “simply relied on the pre-2007

standards.” *Id.* In support, the petitioners included as an exhibit to their petition a letter from the President of the Tennessee Technological University (“Tennessee Tech”), which described a study recently conducted by Tennessee Tech. This study, according to the petitioners, had “analyz[ed] the NO_x, PM, and carbon monoxide . . . emissions from both remanufactured and OEM engines,” and “reached a contrary conclusion” regarding glider vehicle emissions. Petition at 5.

The petitioners maintained that the results of the study “showed that remanufactured engines from model years between 2002 and 2007 performed roughly on par with OEM ‘certified’ engines,” and “in some instances even out-performed the OEM engines.” *Id.* The petitioners further claimed that the Tennessee Tech research “‘showed that remanufactured and OEM engines experience parallel decline in emissions efficiency with increased mileage.’” *Id.*, quoting Tennessee Tech letter at 2. Based on the Tennessee Tech study, the petitioners asserted that “glider vehicles would emit less than 12% of the total NO_x and PM emissions for all Class 8 heavy duty vehicles . . . not 33% as the Phase 2 Rule suggests.” *Id.*, citing 81 FR 73943.

Further, the petitioners complained that the Phase 2 rule had “failed to consider the significant environmental benefits that glider vehicles create.” Petition at 6 (emphasis in original). “Glider vehicle GHG emissions are less than those of OEM vehicles,” the petitioners contended, “due to gliders’ greater fuel efficiency,” and the “carbon footprint of gliders is further reduced by the savings created by recycling materials.” *Id.* The petitioners represented that “[g]lider assemblers reuse approximately 4,000 pounds of cast steel in the remanufacturing process,” including “3,000 pounds for the engine assembly alone.” *Id.* The petitioners pointed out that “[r]eusing these components avoids the environmental impact of casting steel, including the significant associated NO_x emissions.” *Id.* This “fact,” the petitioners argued, is something that EPA should have been considered but was “not considered in the development of the Phase 2 rule.” *Id.*

EPA responded to the glider industry representatives’ joint petition by separate letters on August 17, 2017, stating that the petition had “raise[d] significant questions regarding the EPA’s authority under the Clean Air Act to regulate gliders.”¹² EPA further

indicated that it had “decided to revisit the provisions in the Phase 2 Rule that relate to gliders,” and that the Agency “intends to develop and issue a Federal Register notice of proposed rulemaking on this matter, consistent with the requirements of the Clean Air Act.”¹³

III. Basis for the Proposed Repeal

A. Statutory Analysis

EPA is proposing that the statutory interpretations on which the Phase 2 rule predicated its regulation of glider vehicles, glider engines, and glider kits were incorrect. EPA proposes an interpretation of the relevant language of the CAA under which glider vehicles are excluded from the statutory term “new motor vehicles” and glider engines are excluded from the statutory term “new motor vehicle engines,” as both terms are defined in CAA section 216(3). Consistent with this interpretation of the scope of “new motor vehicle,” EPA is further proposing that it has no authority to treat glider kits as “incomplete” new motor vehicles under CAA section 202(a)(1).

As was noted, a “new motor vehicle” is defined by CAA section 216(3) to mean, in relevant part, a “motor vehicle the equitable or legal title to which has never been transferred to an ultimate purchaser.” 42 U.S.C. 7550(3). In basic terms, a glider vehicle consists of the new components that make up a glider kit, into which a previously owned powertrain has been installed. Prior to the time a completed glider vehicle is sold, it can be said that the vehicle’s “equitable or legal title” has yet to be “transferred to an ultimate purchaser.” It is on this basis that the Phase 2 rule found that a glider vehicle fits within the definition of “new motor vehicle.” 81 FR 73514 (October 25, 2016).

EPA’s rationale for applying this reading of the statutory language was that “[g]lider vehicles are typically marketed and sold as ‘brand new’ trucks.” 81 FR 73514 (October 25, 2016). EPA took note of one glider kit manufacturer’s own advertising materials that represented that the company had “‘mastered the process of taking the ‘Glider Kit’ and installing the components to work seamlessly with the new truck.’” *Id.* (emphasis added in original). EPA stated that the “purchaser of a ‘new truck’ necessarily takes initial title to that truck.” *Id.* (citing statements

Fitzgerald Glider Kits (Aug. 17, 2017). Available in the rulemaking docket, EPA–HQ–OAR–2014–0827, and at <https://www.epa.gov/sites/production/files/2017-08/documents/hd-ghg-phase2-ttma-ltr-2017-08-17.pdf>.

¹³ *Id.*

¹⁰ *Id.*

¹¹ See Petition for Reconsideration of Application of the Final Rule Entitled “Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles—Phase 2 Final Rule” to Gliders, from Fitzgerald Glider Kits, LLC; Harrison Truck Centers, Inc.; and Indiana Phoenix, Inc. (July 10, 2017) (Petition). Available in the rulemaking docket, EPA–HQ–OAR–2014–0827, and at <https://www.epa.gov/sites/production/files/2017-07/documents/hd-ghg-fr-fitzgerald-recons-petition-2017-07-10.pdf>.

¹² See, e.g., Letter from E. Scott Pruitt, EPA Administrator, to Tommy C. Fitzgerald, President,

on the glider kit manufacturer's Web site). EPA rejected arguments raised in comments that "this 'new truck' terminology is a mere marketing ploy." *Id.* Rather, EPA stated, "it obviously reflects reality." *Id.*

In proposing a new interpretation of the relevant statutory language, EPA now believes that its prior reading was not the best reading, and that the Agency failed to consider adequately the most important threshold consideration: *i.e.*, whether or not Congress, in defining "new motor vehicle" for purposes of Title II, had a specific intent to include within the statutory definition such a thing as a glider vehicle—a vehicle comprised both of new *and* previously owned components. See *Chevron*, 467 U.S. at 843 n.9 (Where the "traditional tools of statutory construction" allow one to "ascertain[] that Congress had an intention on the precise question at issue," that "intention is the law and must be given effect."). Where "Congress has not directly addressed the precise question at issue," and the "statute is silent or ambiguous with respect to the specific issue," it is left to the agency charged with implementing the statute to provide an "answer based on a permissible construction of the statute." *Id.* at 843.

Focusing solely on that portion of the statutory definition that provides that a motor vehicle is considered "new" prior to the time its "equitable or legal title" has been "transferred to an ultimate purchaser," a glider vehicle would appear to qualify as "new." As the Supreme Court has repeatedly counseled, however, that is just the beginning of a proper interpretive analysis. The "definition of words in isolation," the Court has noted, "is not necessarily controlling in statutory construction." See *Dolan v. United States Postal Service*, 546 U.S. 481, 486 (2006). Rather, the "interpretation of a word or phrase depends upon reading the whole statutory text, considering the purpose and context of the statute," and "consulting any precedents or authorities that inform the analysis." *Id.* Similarly, in seeking to "determine congressional intent, using traditional tools of statutory construction," the "starting point is the language of the statute." See *Dole v. United Steelworkers of America*, 494 U.S. 26, 35 (1990) (emphasis added) (internal citation omitted). At the same time, "in expounding a statute," one is not to be "guided by a single sentence or member of a sentence," but is to "look to the provisions of the whole law, and to its object and policy." *Id.* (internal citations omitted).

Assessed in light of these principles, it is clear that EPA's reading of the statutory definition of "new motor vehicle" in the Phase 2 rule fell short. First, that reading failed to account for the fact that, at the time this definition of "new motor vehicle" was enacted, it is likely that Congress did not have in mind that the definition would be construed as applying to a vehicle comprised of new body parts and a previously owned powertrain. The manufacture of glider vehicles to salvage the usable powertrains of trucks wrecked in accidents goes back a number of years.¹⁴ But only more recently—after the enactment of Title II—have glider vehicles been produced in any great number.

Furthermore, the concept of deeming a motor vehicle to be "new" based on its "equitable or legal title" not having been transferred to an "ultimate purchaser" appears to have originated with an otherwise unrelated federal statute that predated Title II by a few years—*i.e.*, the Automobile Information Disclosure Act of 1958, Public Law 85–506 (Disclosure Act).¹⁵ The history of Title II's initial enactment and subsequent development indicates that, in adopting a definition of "new motor vehicle" for purposes of the Clean Air Act, Congress drew on the approach it had taken originally with the Disclosure Act.

Among other things, the Disclosure Act requires that a label be affixed to the windshield or side window of new automobiles, with the label providing such information as the Manufacturer's Suggested Retail Price. See 15 U.S.C. 1232 ("Every manufacturer of *new automobiles* distributed in commerce shall, prior to the delivery of any *new automobile* to any dealer, or at or prior to the introduction date of new models delivered to a dealer prior to such introduction date, securely affix to the windshield, or side window of *such automobile* a label . . .") (emphases added). The Disclosure Act defines the term "automobile" to "include[] any passenger car or station wagon," and defines the term "new automobile" to mean "an automobile the equitable or legal title to which has never been transferred by a manufacturer, distributor, or dealer to an ultimate purchaser." See 15 U.S.C. 1231(c), (d).

In 1965, Congress amended the then-existing Clean Air Act, and for the first time enacted provisions directed at the control of air pollution from motor vehicles. See Clean Air Act

Amendments of 1965, Public Law 89–272 (1965 CAA). Included in the 1965 CAA was a brand new Title II, the "Motor Vehicle Air Pollution Control Act," the structure and language of which largely mirrored key provisions of Title II as it exists today. Section 202(a) of the 1965 CAA provided that the "Secretary [of what was then the Department of Health, Education and Welfare] shall by regulation, giving appropriate consideration to technological feasibility and economic costs, prescribe . . . standards applicable to the emission of any kind of substance, from any class or classes of *new motor vehicles or new motor vehicle engines*, which in his judgment cause or contribute to, or are likely to cause or to contribute to, air pollution which endangers the health or welfare of any persons . . ." Public Law 89–272, 79 Stat. 992 (emphasis added).

Section 208 of the 1965 CAA defined "motor vehicle" in terms identical to those in the CAA today: "any self-propelled vehicle designed for transporting persons or property on a street or highway." Public Law 89–272, 79 Stat. 995. The 1965 CAA defined "new motor vehicle" and "new motor vehicle engine" to mean, as relevant here, "a motor vehicle the equitable or legal title to which has never been transferred to an ultimate purchaser; and the term 'new motor vehicle engine'" to mean "an engine in a new motor vehicle or a motor vehicle engine the equitable or legal title to which has never been transferred to the ultimate purchaser." *Id.* Again, in relevant part, the 1965 CAA definitions of these terms were identical to those that currently appear in CAA section 216(3).

While the legislative history of the 1965 CAA does not expressly indicate that Congress based its definition of "new motor vehicle" on the definition of "new automobile" first adopted by the Automobile Information Disclosure Act of 1958, it seems clear that such was the case. The statutory language of the two provisions is identical in all pertinent respects,¹⁶ and there appears to be no other federal statute, in existence prior to enactment of the 1965

¹⁶ Further, the 1965 CAA's definition of "ultimate purchaser," as set forth in section 208(5), for the most part tracks the Disclosure Act's earlier-enacted definition: "The term 'ultimate purchaser' means, with respect to any new automobile, the first person, other than a dealer purchasing in his capacity as a dealer, who in good faith purchases such new automobile for purposes other than resale." Compare 1965 CAA section 208(5), Public Law 89–272, 79 Stat. 995 with 15 U.S.C. 1231(g). Such is the case, too, with respect to the 1965 CAA's definition of "manufacturer." Compare 1965 CAA section 208(1), Public Law 89–272, 79 Stat. 994–995 with 15 U.S.C. 1231(a).

¹⁴ EPA–HQ–OAR–2014–0827–1964.

¹⁵ The provisions of the Disclosure Act are set forth at 15 U.S.C. 1231–1233.

CAA, from which Congress could have derived that terminology.

Subsequently, the statutory language from the 1965 CAA, defining the terms “motor vehicle,” “new motor vehicle,” “new motor vehicle engine,” “ultimate purchaser,” and “manufacturer” was incorporated verbatim in the Air Quality Act of 1967 (1967 AQA). See Public Law 148, 81 Stat. 503. The Clean Air Act Amendments of 1970 (1970 CAAA) did not change those definitions, except to add the language regarding “vehicles or engines imported or offered for importation” that currently appears in CAA section 216(3). See Public Law 91-604, 84 Stat. 1694, 1703.¹⁷

The fact that Congress, in first devising the CAA’s definition of “new motor vehicle” for purposes of Title II, drew on the pre-existing definition of “new automobile” in the Automobile Information Disclosure Act of 1958 serves to illuminate congressional intent. As with the Disclosure Act, Congress in the 1965 CAA selected the point of first transfer of “equitable or legal title” to serve as a bright line—*i.e.*, to distinguish between those “new” vehicles (and engines) that would be subject to emission standards adopted pursuant to CAA section 202(a)(1) and those existing vehicles that would not be subject. Insofar as the 1965 CAA definition of “new motor vehicle” was based on the Disclosure Act definition of “new automobile,” it would seem clear that Congress intended, for purposes of Title II, that a “new motor vehicle” would be understood to mean something equivalent to a “new automobile”—*i.e.*, a true “showroom new” vehicle. It is implausible that Congress would have had in mind that a “new motor vehicle” might also include a vehicle comprised of new body parts and a previously owned powertrain.

Given this, EPA does not believe that congressional intent as to the meaning of the term “new motor vehicle” can be clearly ascertained on the basis of an isolated reading of a few words in the statutory definition, where that reading is divorced from the structure and history of the CAA as a whole. Based on that structure and history, it seems likely that Congress understood a “new motor vehicle,” as defined in CAA § 216(3), to be a vehicle comprised entirely of new parts and certainly not a vehicle with a used engine. At a

minimum, ambiguity exists. This leaves EPA with the task of providing an “answer based on a permissible construction of the statute.” *Chevron*, 467 U.S. at 843.

1. Glider Vehicles

EPA is proposing to interpret “new motor vehicle,” as defined in CAA § 216(3), as not including glider vehicles. This is a reasonable interpretation—and commonsense would agree—insofar as it takes account of the reality that significant elements of a glider vehicle (*i.e.*, the powertrain elements, including the engine and the transmission) are previously owned components. Under the Phase 2 rule’s interpretation, in contrast, the act of installing a previously owned powertrain into a glider kit—*i.e.*, something that, as is explained further below, is not a “motor vehicle” as defined by the CAA—results in the creation of a new “motor vehicle.” EPA believes that Congress, in adopting a definition of “new motor vehicle” for purposes of Title II, never had in mind that the statutory language would admit of such a counterintuitive result.

In other words, EPA now believes that, in defining “new motor vehicle,” Congress did not intend that a vehicle comprised of a new outer shell conjoined to a previously owned powertrain should be treated as a “new” vehicle, based solely on the fact that the vehicle may have been assigned a new title following assembly. In this regard, insofar as Title II’s regulatory regime was at its inception directed at the emissions produced by new vehicle engines,¹⁸ it is not at all clear that Congress intended that Title II’s reach should extend to a vehicle whose outer parts may be “new” but whose engine was previously owned.

2. Glider Engines

EPA proposes to find that, since a glider vehicle does not meet the statutory definition of a “new motor vehicle,” it necessarily follows that a glider engine is not a “new motor vehicle engine” within the meaning of CAA section 216(3). Under that provision, a motor vehicle engine is deemed to be “new” in either of two circumstances: (1) The engine is “in a new motor vehicle,” or (2) the “equitable or legal title” to the engine has “never been transferred to the ultimate purchaser.” The second of these circumstances can never apply to a glider engine, which is invariably an engine that has been previously owned.

As to the first circumstance, a glider engine is installed in a glider kit, which in itself is not a “motor vehicle.” A glider kit becomes a “motor vehicle” only after an engine (and the balance of the powertrain) has been installed. But while adding a previously owned engine to a glider kit may result in the creation of a “motor vehicle,” the assertion that the previously owned engine thereby becomes a “new motor vehicle engine” within the meaning of CAA section 216(3), due to the engine’s now being in a “new motor vehicle,” reflects circular thinking. It presupposes that the installation of a (previously owned) engine in a glider kit creates not just a “motor vehicle” but a “new motor vehicle.” EPA is proposing to interpret the relevant statutory language in a manner that rejects the Agency’s prior reliance on the view that (1) installing a previously owned engine in a glider kit transforms the glider kit into a “new motor vehicle,” and (2) that, thereafter, the subsequent presence of that previously owned engine in the supposed “new motor vehicle” transforms that engine into a “new motor vehicle engine” within the meaning of CAA section 216(3).

3. Glider Kits

Under EPA’s proposed interpretation, EPA would have no authority to regulate glider kits under CAA section 202(a)(1). If glider vehicles are not “new motor vehicles,” which is the interpretation of CAA section 216(3) that EPA is proposing here, then the Agency lacks authority to regulate glider kits as “incomplete” new motor vehicles. Further, given that a glider kit lacks a powertrain, a glider kit does not explicitly meet the definition of “motor vehicle,” which, in relevant part, is defined to mean “any self-propelled vehicle.” 42 U.S.C. 7550(2) (emphasis added). It is not obvious that a vehicle without a motor could constitute a “motor vehicle.”

4. Issues for Which EPA Seeks Comment

EPA believes that its proposed interpretation is the most reasonable reading of the relevant statutory language, and that its proposed determination, based on this interpretation, that regulation of glider vehicles, glider engines, and glider kits is not authorized by CAA section 202(a)(1) is also reasonable. EPA seeks comment on this interpretation.

Comments submitted in the Phase 2 rulemaking docket lead EPA to believe that a glider vehicle is often a suitable option for those small businesses and independent operators who cannot afford to purchase a new vehicle, but

¹⁷ The legislative history of both the 1967 AQA and 1977 CAAA is silent with respect to the origin of Title II’s definitions of “new motor vehicle,” “new motor vehicle engine,” “ultimate purchaser,” and “manufacturer,” which further underscores that Congress had originally derived those definitions from the Disclosure Act.

¹⁸ See footnote 3, *supra*.

who wish to replace an older vehicle with a vehicle that is equipped with up-to-date safety features. EPA solicits comment and further information as to this issue. EPA also solicits comment and information on whether limiting the availability of glider vehicles could result in older, less safe, more-polluting trucks remaining on the road that much longer. EPA particularly seeks information and analysis addressing the question whether glider vehicles produce significantly fewer emissions overall compared to the older trucks they would replace.

EPA also seeks comment on the matter of the anticipated purchasing behavior on the part of the smaller trucking operations and independent drivers if the regulatory provisions at issue were to be repealed. Further, EPA seeks comment on the relative expected emissions impacts if the regulatory requirements at issue here were to be repealed or were to be left in place.

Finally, EPA seeks comment on whether, if the Agency were to determine not to adopt the interpretation of CAA sections 202(a)(1) and 216(3) being proposed here, EPA should nevertheless revise the “interim provisions” of Phase 2 rule, 40 CFR 1037.150(t)(1)(ii), to increase the exemption available for small manufacturers above the current limit of 300 glider vehicles per year. EPA seeks input on how large an increase would be reasonable, were the Agency to increase the limit in taking final action. Further, EPA seeks comment on whether, if the Agency were to determine not to adopt the statutory interpretation being proposed here, EPA should nevertheless extend by some period of time the date for compliance for glider vehicles, glider engines, and glider kits set forth in 40 CFR 1037.635. EPA seeks comment on what would be a reasonable extension of the compliance date.

B. Conclusion

EPA has a fundamental obligation to ensure that the regulatory actions it takes are authorized by Congress, and that the standards and requirements that it would impose on the regulatory community have a sound and reasonable basis in law. EPA is now proposing to find that the most reasonable reading of the relevant provisions of the CAA, including CAA sections 202(a)(1), 216(2), and 216(3) is that glider vehicles should not be regulated as “new motor vehicles,” that glider engines should not be regulated as “new motor vehicle engines,” and that glider kits should not be regulated as “incomplete” new motor vehicles.

Based on this proposed interpretation, EPA is proposing to repeal those provisions of the Phase 2 rule applicable to glider vehicles, glider engines, and glider kits.

IV. Public Participation

We request comment by January 5, 2018 on all aspects of this proposal. This section describes how you can participate in this process.

Materials related to the Heavy-Duty Phase 2 rulemaking are available in the public docket noted above and at: <https://www.epa.gov/regulations-emissions-vehicles-and-engines/regulations-greenhouse-gas-emissions-commercial-trucks>.

1. How do I prepare and submit information?

Direct your submittals to Docket ID No. EPA-HQ-OAR-2014-0827. EPA’s policy is that all submittals received will be included in the public docket without change and may be made available online at www.regulations.gov, including any personal information provided, unless the submittal includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute.

Do not submit information to the docket that you consider to be CBI or otherwise protected through www.regulations.gov. The www.regulations.gov Web site is an “anonymous access” system, which means EPA will not know your identity or contact information unless you provide it in the body of your submittal. If you submit an electronic submittal, EPA recommends that you include your name and other contact information in the body of your submittal and with any disk or CD-ROM you submit. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses. For additional information about EPA’s public docket visit the EPA Docket Center homepage at <http://www.epa.gov/epahome/dockets.htm>.

EPA will hold a public hearing on the date and at the location stated in the **DATES** Section. To attend the hearing, individuals will need to show appropriate ID to enter the building. The hearing will start at 10:00 a.m. local time and continue until everyone has had a chance to speak. More details concerning the hearing can be found at <https://www.epa.gov/regulations-emissions-vehicles-and-engines/regulations-greenhouse-gas-emissions-commercial-trucks>.

2. Submitting CBI

Do not submit this information to EPA through www.regulations.gov or email. Clearly mark the part or all of the information that you claim to be CBI. For CBI information in a disk or CD-ROM that you mail to EPA, mark the outside of the disk or CD-ROM as CBI and then identify electronically within the disk or CD-ROM the specific information that is claimed as CBI. In addition to one complete version of the comment that includes information claimed as CBI, a copy of the comment that does not contain the information claimed as CBI must be submitted for inclusion in the public docket. Information so marked will not be disclosed except in accordance with procedures set forth in 40 CFR part 2.

3. Tips for Preparing Your Comments

When submitting comments, remember to:

- Identify the action by docket number and other identifying information (subject heading, **Federal Register** date and page number).
- Explain why you agree or disagree; suggest alternatives and substitute language for your requested changes.
- Describe any assumptions and provide any technical information and/or data that you used.
- If you estimate potential costs or burdens, explain how you arrived at your estimate in sufficient detail to allow for it to be reproduced.
- Provide specific examples to illustrate your concerns, and suggest alternatives.
- Explain your views as clearly as possible, avoiding the use of profanity or personal threats.
- Make sure to submit your comments by the comment period deadline identified in the **DATES** section above.

V. Statutory and Executive Order Reviews

(1) *Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review*

This action is a significant regulatory action that was submitted to the Office of Management and Budget (OMB) for review. Any changes made in response to OMB recommendations have been documented in the docket.

(2) *Executive Order 13771: Reducing Regulations and Controlling Regulatory Costs*

This action is expected to be an Executive Order 13771 deregulatory action. This proposed rule is expected

to provide meaningful burden reduction by eliminating regulatory requirements for glider manufacturers.

(3) Paperwork Reduction Act (PRA)

This action does not impose an information collection burden under the PRA because it does not contain any information collection activities. It would only eliminate regulatory requirements for glider manufacturers.

(4) Regulatory Flexibility Act (RFA)

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. In making this determination, the impact of concern is any significant adverse economic impact on small entities. An agency may certify that a rule will not have a significant economic impact on a substantial number of small entities if the rule relieves regulatory burden, has no net burden, or otherwise has a positive economic effect on the small entities subject to the rule. Small glider manufacturers would be allowed to produce glider vehicles without meeting new motor vehicle emission standards. We have therefore concluded that this action will have no adverse regulatory impact for any directly regulated small entities.

(5) Unfunded Mandates Reform Act (UMRA)

This action does not contain any unfunded mandate as described in UMRA, 2 U.S.C. 1531–1538, and does not significantly or uniquely affect small governments. The action imposes no enforceable duty on any state, local, or tribal governments.

(6) Executive Order 13132: Federalism

This action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government.

(7) Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

This action does not have tribal implications as specified in Executive Order 13175. This proposed rule will be implemented at the Federal level and affects glider manufacturers. Thus, Executive Order 13175 does not apply to this action.

(8) Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks

This action is not subject to Executive Order 13045 because it is not an economically significant regulatory action as defined by Executive Order 12866. However, the Emission Requirements for Glider Vehicles, Glider Engines, and Glider Kits was anticipated to lower ambient concentrations of PM_{2.5} and some of the benefits of reducing these pollutants may have accrued to children. Our evaluation of the environmental health or safety effects of these risks on children is presented in Section XIV.H. of the HD Phase 2 Rule.¹⁹ Some of the benefits for children's health as described in that analysis would be lost as a result of this action.

In general, current expectations about future emissions of pollution from these trucks is difficult to forecast given uncertainties in future technologies, fuel prices, and the demand for trucking. Furthermore, the proposed action does not affect the level of public health and environmental protection already being provided by existing NAAQS and other mechanisms in the CAA. This proposed action does not affect applicable local, state, or federal permitting or air quality management programs that will continue to address areas with degraded air quality and maintain the air quality in areas meeting current standards. Areas that need to reduce criteria air pollution to meet the NAAQS will still need to rely on control strategies to reduce emissions. To the extent that states use other mechanisms in order to comply with the NAAQS, and still achieve the criteria pollution reductions that would have occurred under the CPP, this proposed rescission will not have a disproportionate adverse effect on children's health.

(9) Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

This action is not a "significant energy action" because it is not likely to have a significant adverse effect on the supply, distribution, or use of energy.

(10) National Technology Transfer and Advancement Act (NTTAA)

This rulemaking does not involve technical standards.

(11) Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations, and Low-Income Populations

Pursuant to Executive Order 12898 (59 FR 7629, February 16, 1994), EPA considered environmental justice concerns of the final HD Phase 2 rule. EPA's evaluation of human health and environmental effects on minority, low-income or indigenous populations for the final HD Phase 2 rule is presented in the Preamble, Section VIII.A.8 and 9 (81 FR 73844–7, October 25, 2016). We have not evaluated the impacts on minority, low-income or indigenous populations that may occur as a result of the proposed action to rescind emissions requirements for heavy-duty glider vehicles and engines. EPA likewise has not considered the economic and employment impacts of this rule specifically as they relate to or might impact minority, low-income and indigenous populations.

List of Subjects in 40 CFR Parts 1037 and 1068

Environmental protection, Administrative practice and procedure, Air pollution control, Confidential business information, Labeling, Motor vehicle pollution, Reporting and recordkeeping requirements, Warranties.

Dated: November 9, 2017.

E. Scott Pruitt,
Administrator.

For the reasons set out in the preamble, title 40, chapter I of the Code of Federal Regulations is proposed to be amended as set forth below.

PART 1037—CONTROL OF EMISSIONS FROM NEW HEAVY-DUTY MOTOR VEHICLES

■ 1. The authority for part 1037 continues to read as follows:

Authority: 42 U.S.C. 7401–7671q.

Subpart B—[Amended]

■ 2. Section 1037.150 is amended by removing and reserving paragraph (t) as follows:

§ 1037.150 Interim provisions.

* * * * *

(t) [Reserved]

* * * * *

Subpart G—[Amended]

§ 1037.635 [Removed]

■ 3. Section 1037.635 is removed.

¹⁹ 81 FR 73478 (October 25, 2016).

Subpart I—[Amended]

■ 4. Section 1037.801 is amended by removing the definitions “glider kit” and “glider vehicle” and revising the definitions of “manufacturer” and “new motor vehicle” to read as follows:

§ 1037.801 Definitions.

* * * * *

Manufacturer has the meaning given in section 216(1) of the Act. In general, this term includes any person who manufactures or assembles a vehicle (including a trailer or another incomplete vehicle) for sale in the United States or otherwise introduces a new motor vehicle into commerce in the United States. This includes importers who import vehicles for resale.

* * * * *

New motor vehicle has the meaning given in the Act. It generally means a motor vehicle meeting the criteria of either paragraph (1) or (2) of this

definition. New motor vehicles may be complete or incomplete.

(1) A motor vehicle for which the ultimate purchaser has never received the equitable or legal title is a new motor vehicle. This kind of vehicle might commonly be thought of as “brand new” although a new motor vehicle may include previously used parts. Under this definition, the vehicle is new from the time it is produced until the ultimate purchaser receives the title or places it into service, whichever comes first.

(2) An imported heavy-duty motor vehicle originally produced after the 1969 model year is a new motor vehicle.

* * * * *

PART 1068—GENERAL COMPLIANCE PROVISIONS FOR HIGHWAY, STATIONARY, AND NONROAD PROGRAMS

■ 5. The authority for part 1068 continues to read as follows:

Authority: 42 U.S.C. 7401–7671q.

Subpart B—[Amended]

■ 6. Section 1068.120 is amended by revising paragraph (f)(5) to read as follows:

§ 1068.120 Requirements for rebuilding engines.

* * * * *

(f) * * *

(5) The standard-setting part may apply further restrictions to situations involving installation of used engines to repower equipment.

* * * * *

[FR Doc. 2017–24884 Filed 11–15–17; 8:45 am]

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Chassis Dynamometer Testing of Two Recent Model Year Heavy-Duty On-Highway Diesel Glider Vehicles

November 20, 2017

National Vehicle & Fuel Emissions Laboratory
U.S. Environmental Protection Agency
Ann Arbor, Michigan

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1. Executive Summary

This report summarizes the results from emissions testing of a 2016 model year (MY) Peterbilt 389 sleeper cab tractor and a 2017 MY Peterbilt 579 sleeper cab tractor that were produced as glider vehicles (i.e., a vehicle with a new chassis and a used powertrain). In addition, these glider test results are compared to equivalent tests of conventionally manufactured 2014 and 2015 MY tractors.

The glider vehicles tested include one of the more popular engine and vehicle configurations currently being produced as glider vehicles. These results are useful in evaluating the emission impacts of glider vehicles, and the observations made in this report are consistent with the expected emissions performance of heavy-duty highway diesel engines manufactured in the 1998-2002 timeframe.

The criteria pollutant emissions (NO_x, PM, HC, CO) from the 2016 MY Peterbilt 389 and 2017 Peterbilt 579 glider vehicles were consistently higher than those of the conventionally manufactured 2014 and 2015 tractors. The extent to which this occurred depended on the pollutant and the test cycle.

- Under highway cruise conditions, NO_x emissions from the Peterbilt 389 and Peterbilt 579 glider vehicles were approximately 43 times as high, and PM emissions were approximately 55 times as high as the conventionally manufactured 2014 and 2015 MY tractors.
- Under transient operations, absolute NO_x and PM emissions were higher for the Peterbilt 389 and Peterbilt 579 glider vehicles on all duty cycles. On a relative basis, the glider vehicle NO_x emissions were 4-5 times higher, and PM emissions were 50-450 times higher than the conventionally manufactured 2014 and 2015 MY tractors.
- HC and CO emissions for the Peterbilt 389 and Peterbilt 579 glider vehicles were also significantly higher than the conventionally manufactured 2014 and 2015 MY tractors on a relative basis. However, on an absolute basis, they appear to be less of a concern than the NO_x and PM emissions.
- CO₂ emissions from the Peterbilt 389 and Peterbilt 579 glider vehicles were lower than the conventionally manufactured vehicles when measured on the chassis dynamometer without taking into account the differences in the aerodynamic drag between the vehicles.

2. Test Program

All testing was conducted by the US Environmental Protection Agency (EPA) in October and November 2017 at the National Vehicle Fuel and Emissions Laboratory (NVFEL). Two glider vehicles were tested on a heavy-duty chassis dynamometer to measure the emissions in a controlled environment. The following subsections describe the elements of the test program.

The testing was conducted using the same test cycles and test procedures that EPA has previously used to measure emissions from heavy-duty diesel vehicles, which allows us to put glider vehicle emission results into context. Comparisons to these other highway heavy-duty vehicles are discussed in Section 4.

2.1 Glider Vehicle Descriptions

Two newer model year glider vehicles with remanufactured pre-2002 MY engines were emissions tested in this program.

2.1.1 Glider #1 Vehicle Description

The first glider vehicle tested (Glider #1) was a 2016 MY Peterbilt 389 Glider-Sleeper with a Fitzgerald-rebuilt 12.7 L Detroit Diesel Series 60 engine with 500 horsepower, an Eaton 13 speed manual transmission, and 3.55 rear axle ratio. The Peterbilt 389 exterior has a traditional design that has a squarer front rather than a more aerodynamic design that is more common for model year 2016 and later model vehicles. The engine did not include an emission label, but is believed to have been remanufactured from an engine originally certified in a model year between 1998 and 2002. It included electronically-controlled fuel injection, but not exhaust gas recirculation or any exhaust aftertreatment. The odometer read 179,273 miles at the start of testing.

The malfunction indicator light (MIL), also known as the check engine light, was illuminated when Glider #1 was received. Upon inspection it was determined that the engine fault code was “Engine Oil Pressure> Fault Mode ID:0-DATA VALID BUT ABOVE NORMAL OPERATIONAL RANGE.” EPA tested the as-received condition because it is representative of how the vehicle was driving in the real world. Upon completion of the first set of testing, diagnostics were performed to fix the issue. CAN bus data recorded during testing was reviewed and it was determined that in addition to the oil pressure signal, temperature readings from the fuel, oil and intake air sensor were all dropping low simultaneously. The sensor wiring harness was removed from the vehicle because the MIL was intermittent and identified an error with the oil pressure. The harness was inspected visually and evaluated for electrical continuity. During inspection it was determined that there was oil in the connector of the oil temperature sensor as well as fluid in the connector for the coolant sensor. These connectors were cleaned and the harness was reinstalled. Glider #1 was then driven and it was concluded that the repair was successful. The On-Board Diagnostics (OBD) system did not

detect an issue for the remainder of testing. The emissions tests were then repeated to evaluate the emissions of a properly performing vehicle.

2.1.2 Glider #2 Vehicle Description

The second glider vehicle tested (Glider #2) was a 2017 MY Peterbilt 579 Glider-Sleeper cab tractor with a Fitzgerald-rebuilt 12.7 L Detroit Diesel Series 60 engine with 500 horsepower and an Eaton RTX-16710B 10 speed manual transmission. The body of the Peterbilt 579 tractor was more aerodynamic than the Peterbilt 389. Similar to Glider #1, the engine in this vehicle did not include an emission label, but is believed to have been remanufactured from an engine originally certified in a model year between 1998 and 2002. It included electronically-controlled fuel injection, but not exhaust gas recirculation or any exhaust aftertreatment. The vehicle had approximately 30,600 miles at the start of testing. Unlike Glider #1, Glider #2 did not have any check engine light warnings during the testing.

2.2 Road Load Coefficients

Chassis dynamometer testing requires a simulation of the road load impacts, such as aerodynamics and losses associated with the driveline. These parameters simulate the amount of resistance (i.e., load) that the vehicle is under at different vehicle speeds. The actual road load impact varies significantly in-use because it is dependent on variables such as an actual trailer being pulled and the weight of the vehicle. Road load coefficients are frequently determined by conducting coastdown testing prior to chassis dynamometer testing. In this instance, EPA did not conduct coastdown testing to determine the road load coefficients of the vehicles due to the limited amount of time the glider vehicles were on loan to EPA. Rather, we tested the vehicles each with two sets of road load coefficients covering a range of typical operation. The first set of road load coefficients represents a 60,000 pound combined weight of the tractor, trailer, and payload. The second set of road load coefficients represents a less aerodynamic vehicle with 80,000 pound combined weight of the tractor, trailer, and payload. The target and actual road load coefficients used in the testing are shown in Table 1.

Table 1: Road Load Coefficients

Configuration	Target Coefficients			Set Coefficients		
	A (lbf)	B (lbf/mph)	C (lbf/mph ²)	A (lbf)	B (lbf/mph)	C (lbf/mph ²)
Glider #1, 60k Test Weight	345.090	0.0000	0.15380	235.350	-2.1042	0.143390
Glider #1, 80k test weight	446.350	7.76060	0.14780	336.690	5.5976	0.137120
Glider #2, 60k Test Weight	345.090	0.0000	0.15380	204.530	-1.4243	0.145510
Glider #2, 80k test weight	446.350	7.76060	0.14780	314.620	5.9516	0.145980

2.3 Test Fuel

The test fuel used in this program met the EPA highway certification diesel fuel specifications in 40 CFR part 1065. The fuel properties can be found in Table 2. The glider vehicles went through a triple drain and flush procedure as shown in Table 3 to ensure the engine was operating on the test fuel.

Table 2: Certification Diesel Fuel Specifications

FTAG	Fuel Name	ALPHA	BETA	Cetane	Net Heating Value (BTU/lb)	Carbon Weight Fraction	Sulfur (ppm)	Specific Gravity
26758	Federal Cert Diesel 7-15 ppm Sulfur	1.78	0	44.3	18406	0.8699	8.4	0.8536

Table 3: Fuel change procedure

Step	Description
1	With the ignition key in OFF position, drain vehicle fuel completely via installed fuel drain or the fuel rail.
2	Fill fuel tank to 10% with Diesel Fuel, NVFEL FTAG 26758.
3	Operate the vehicle at idle for 10-15 minutes to allow the fuel system to purge and stabilize.
4	Repeat Steps 1-3. (If repeated steps 1-3, move to Step 5)
5	Repeat Steps 1-3, but fill the fuel tank to 100% with NVFEL Diesel Fuel, FTAG 26758.
6	Run vehicle road load derivations.

2.4 Test Cycles

The emission tests for both gliders were conducted on a chassis dynamometer using three different sets of heavy-duty drive cycles representing a variety of operation. A cold start Heavy-Duty Vehicle Urban Dynamometer Driving Schedule (UDDS) sequence, a World Harmonized Vehicle Cycle (WHVC) sequence, and a Super Cycle.

The cold start sequence consisted of the UDDS cycle, a twenty-minute soak period followed by another UDDS, another twenty-minute soak period, a third UDDS cycle and finishing with forty-five minutes of idling. The UDDS sequence is shown in Figure 1.

The World Harmonized Vehicle Cycle (WHVC) was first run as a warmup cycle without emission measurement followed by a second WHVC where emissions were measured. The WHVC cycle is shown in Figure 2.

The Super Cycle followed the WHVC sequence. If more than twenty minutes elapsed between the cycles, then another warm-up WHVC was run without emission measurement to ensure the Super Cycle included a hot start test. The Super Cycle consists of five California Air Resources Board (ARB) Heavy-Duty Transient Cycles (HDT), a ten-minute idle period, and 55 mph and 65 mph cruise cycles with 0.5 mph/sec acceleration/deceleration rates. The Super Cycle trace is shown in Figure 3.

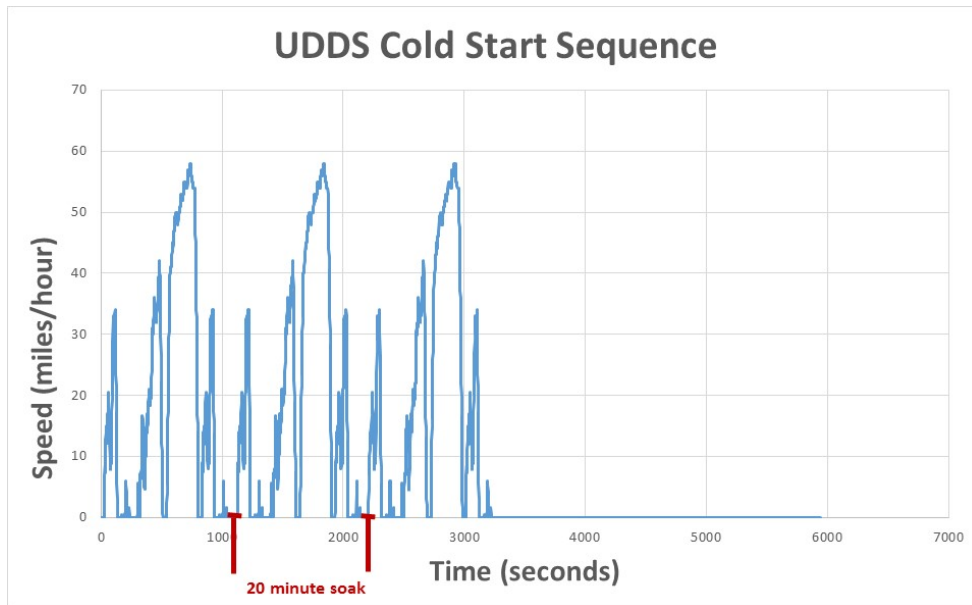


Figure 1: EPA UDDS test cycle speed vs. time profile

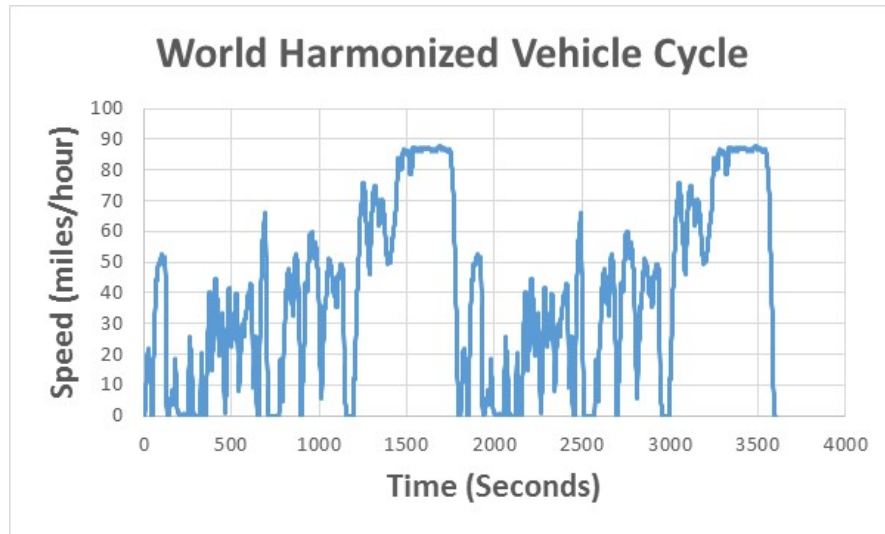


Figure 2: World Harmonized Vehicle Cycle speed vs. time profile

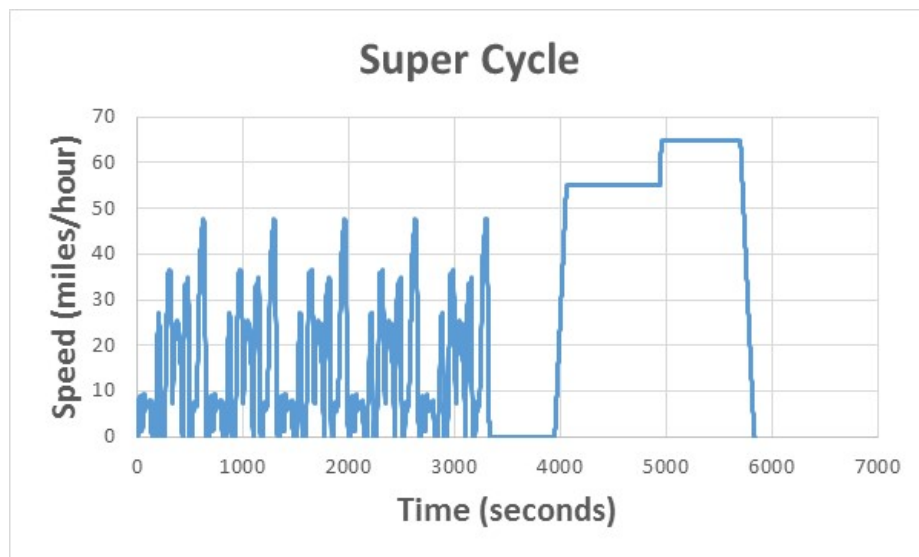


Figure 3: Super Cycle speed vs. time profile

Chassis testing of Glider #2 was also conducted to simulate the engine-based Supplemental Emission Test (SET) defined in 40 CFR 86.1360. Duty cycles were created that matched the defined engine speeds of the SET cycle by driving the vehicle at a constant speed and matched engine torque at the 100%, 75%, 50% and 25% load points at each speed by varying simulated road grade.

The first step of the SET cycle development was to obtain the engine torque curve. This was done by having the dynamometer linearly ramp the vehicle speed from approximately 16 to 68 mph over 315 seconds with the pedal position at 100%. Since the dynamometer was controlling speed for this test instead of torque, the engine power was determined by using the

measured power from the dynamometer corrected for the tire and driveline losses by taking the difference of the losses of target and set coefficients and an assumed axle efficiency of 94%. The resulting torque curve from the test is shown in Figure 4. Using the torque curve, the intermediate test speeds “A”, “B”, and “C” were calculated according to 40 CFR 1065.610.

Finally, three vehicle duty-cycles were created to simulate the engine-based SET on the chassis dynamometer, one for each intermediate speed as shown in Figure 5, Figure 6 and Figure 7. This duty cycle is similar to running the SET as a discrete mode test where the engine is stabilized at each speed and torque setpoint before sampling emissions and the transitions from mode-to-mode are not sampled. The duty cycles were created in this manner because running a Ramped Modal Cycle (RMC) on a chassis dynamometer would be difficult and would not allow for the transmission to be kept in direct drive.

Figure 4 also shows the engine speed and torque where the engine operated for each SET setpoint during the testing. One observation from this figure is that the test speed for the C100 point was slightly lower than the setpoint. This was because the engine was not able to maintain vehicle speed at the defined road grade of the cycle, but since the shift in speed was slight the results were still meaningful for the purpose of this testing.

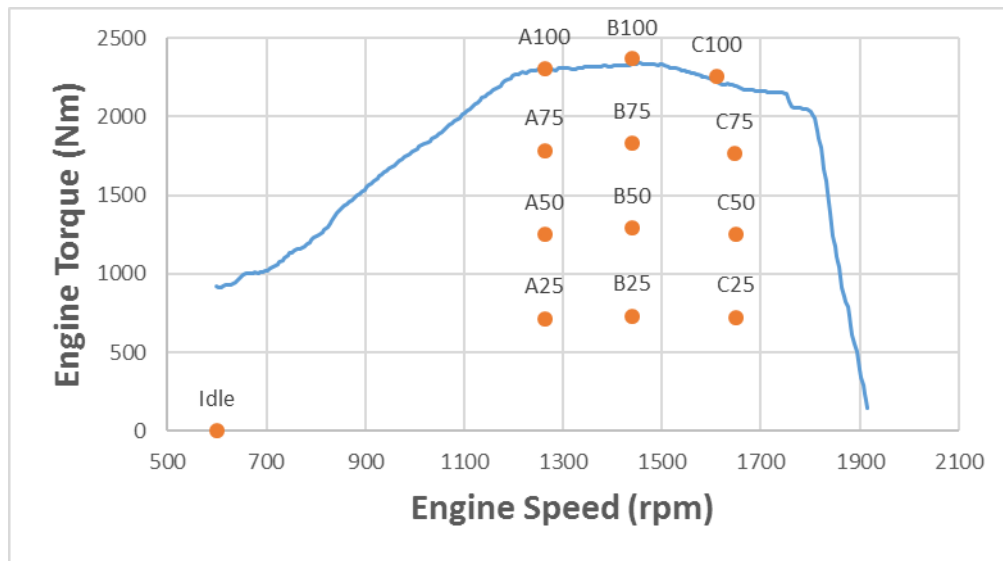


Figure 4: Glider #2 torque curve and SET test points

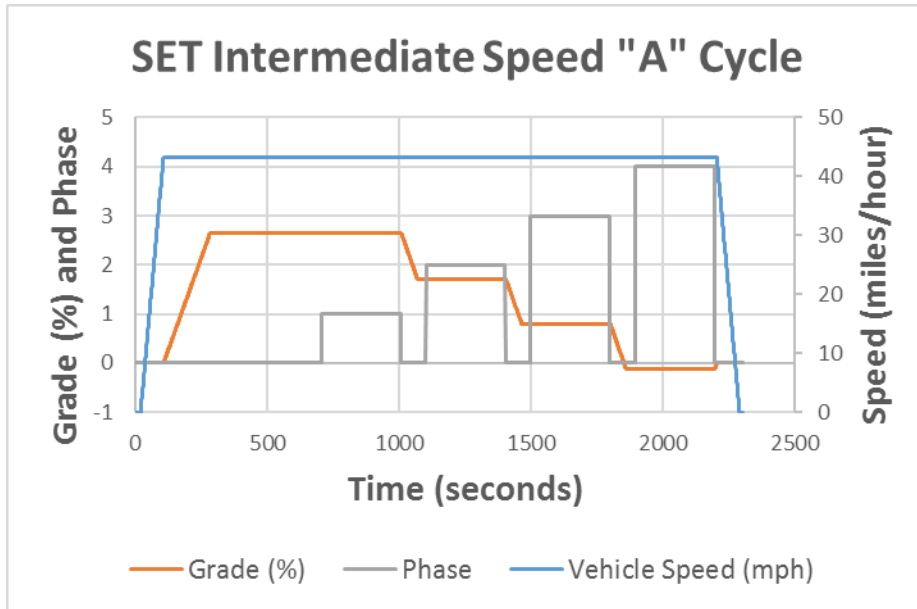


Figure 5: SET Intermediate Speed “A” Cycle speed, grade and phase vs. time

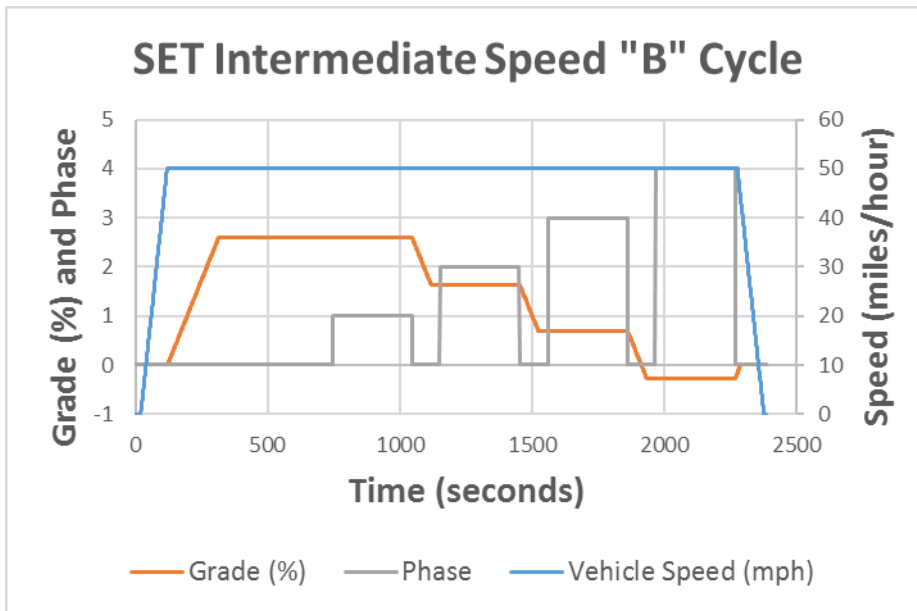


Figure 6: SET Intermediate Speed “B” Cycle speed, grade and phase vs. time

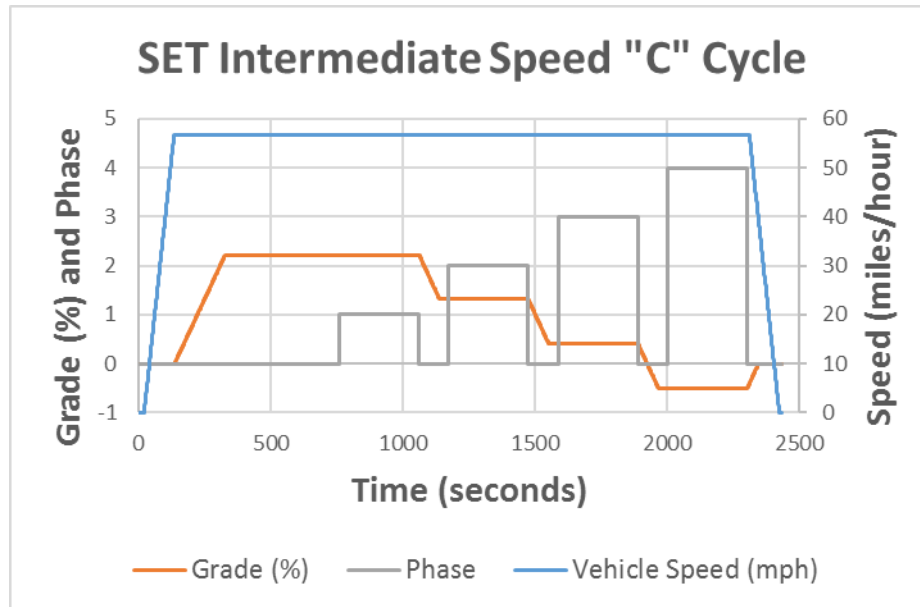


Figure 7: SET Intermediate Speed “C” Cycle speed, grade and phase vs. time

2.5 Vehicle Test Site and Emission Measurements

The chassis dynamometer used for this study is located at the EPA’s National Vehicle & Fuels Emissions Laboratory in Ann Arbor, Michigan. The test site features are shown in Figure 8. Table 4 provides information on the test site equipment. The emissions measured include total hydrocarbons (THC), methane (CH₄), nonmethane hydrocarbon (NMHC), carbon monoxide (CO), oxides of nitrogen (NO_x), and particulate matter (PM as PM₁₀).¹ The emission measurement system for both gaseous and PM based pollutants is based on the Horiba MEXA-ONE platform and is compliant with the requirements in 40 CFR part 1066. The particulate matter weighroom is compliant with 40 CFR 1065.190, including temperature and dewpoint control. The PM weighroom was designed to be compliant as a Class 6 cleanroom or better and meets all of the ambient requirements described in 40 CFR part 1065. The Mettler-Toledo microbalance is compliant with the requirements in 40 CFR 1065.290. The microbalance calibration is NIST traceable as required in 40 CFR part 1065. The weighroom and microbalance provide the ability to accurately measure PM mass gain down to the 1 ug level. The system as a whole can measure PM mass emission rates as low 0.001 g/hp-hr and as high as 2 g/hp-hr.

EPA also utilized an AVL Model 483 MicroSoot Sensor to collect continuous soot data on Glider #2 for a subset of the testing. That data is not presented in this test report.

¹ No attempt was made to measure crankcase emissions from the glider vehicles. However, the distinctive odor of blowby exhaust in the test cell during testing of both glider vehicles (compared to testing other vehicles) indicates that that crankcase emissions could be high.

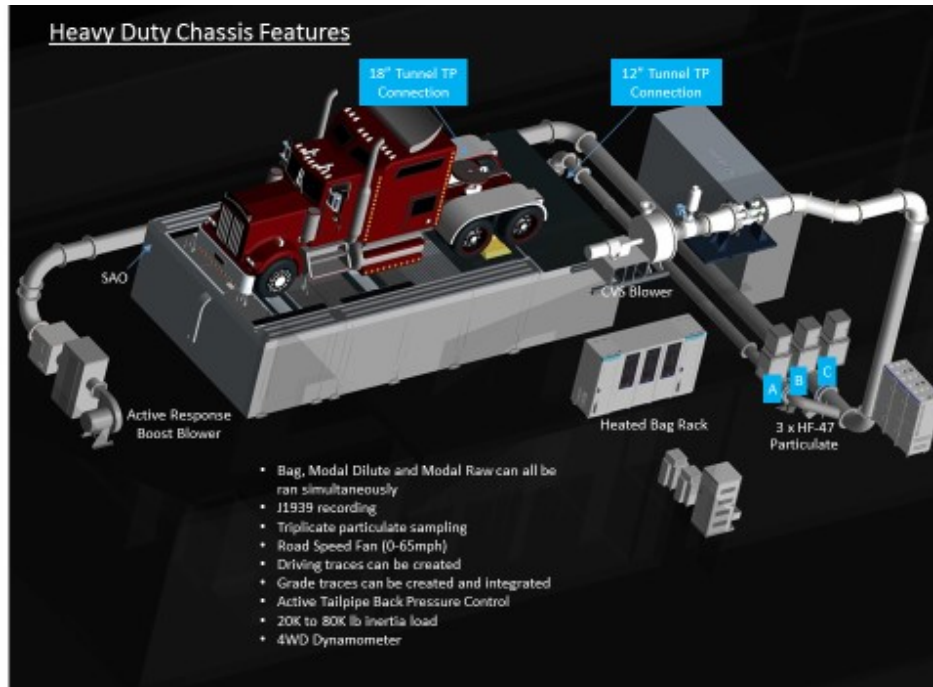


Figure 8: Chassis Dynamometer Overview

Table 4: Test site equipment

Features and Specifications	
4WD Chassis Dynamometer	Type: AIP-ECDM 72H-4WD Operating Speed Range: 0 – 100 mph (0 – 160 km/h) Max Axle Weight of the test vehicle: 44,000 lb (20000 kg) Inertia simulation of up to 80,000 lb (36500 kg)
Fuel	Diesel, Electric, Gasoline & Ethanol Blends
Emissions Sampling	Continuous Gaseous: Raw and Diluted simultaneous Batch: Gaseous Bag
Emission Analyzers	MEXA-ONE platform, Continuous: CO(L), CO(H), CO ₂ , O ₂ , THC, CH ₄ , NO/NO _x Batch: CO(L), CO ₂ (L), THC, CH ₄ , NO/NO _x , N ₂ O
Dilution Tunnel	Heated 12 inch (30.5cm) and 18 inch (45.7cm) diameter tunnel, 4 Critical Flow Venturis allow flow combinations from 19.8 to 116.1 m ³ /min (700 to 4100 scfm). Active tailpipe pressure control
Road Speed Fan	70" x 70" road speed modulated vehicle cooling fan
Particulate	Up to 4 phases sampled in triplicate with secondary dilution available, mass determined with Mettler-Toledo microbalance.
Research Focus	On road heavy-duty and medium-duty vehicles above 20,000 pounds GVWR
CFR scope	40 CFR Part 86 & 1066 define the heavy-duty vehicle test procedures.

There were several verification and maintenance activities conducted in the test site to maintain quality assurance. All analyzer checks were performed according to 40 CFR part 1066 specifications. The activities included, but were not limited to, the following:

- Daily: Cell preparation checks ran included bag leak checks, sample line leak checks and analyzer zero and span checks.
- Weekly: Dynamometer coastdowns at 20,000 lb and 80,000 lb for MAHA 4WD dynamometer, Dynamometer Parasitic Losses Verification, Gravimetric Propane Injection for THC, Sample Analysis Correlations for bag checks on CO, CO₂, CH₄, NO_x emissions.
- Every 35 days: CH₄ Gas Chromatography column efficiency check, NO_x converter check, chemiluminescent detector CO₂ + H₂O Quench Check, and gas analyzer linearity checks per 40 CFR part 1066.
- Typically, annually: Flame ionization detector (FID) O₂ inference check, FID response factor check, nondispersive infrared (NDIR) analyzer interference checks, and emissions sampling unit (ESU) leak check.

3. Emissions Results

3.1 Criteria Pollutants

The average emission results of the individual vehicles tested over the UDDS, WHVC, and Super Cycle are found in the following tables for NO_x, NMHC, and CO. The other gaseous emissions such as THC, CH₄, and CO₂ are found in Appendices A, B and C.

The UDDS cycle began with a cold start. The testing sequence included an initial cold start UDDS, then a 20-minute soak followed by another UDDS, a 20-minute soak and UDDS followed by 45 minutes of idle. The emission results for testing at 60,000 pounds and 80,000 pounds for both glider vehicles are shown in Table 5. Glider #1, a 2016 MY Peterbilt 389 sleeper cab tractor, values only include the results from the tests after the check engine light issue was fixed. The results represent an average emissions of the tests performed for a given vehicle and configuration. See Appendix A for additional emissions results, including the results from the individual tests and the results from Glider #1 with the check engine light on.

Table 5: UDDS Results from the 2016 MY Peterbilt 389 Glider #1 and 2017 MY Peterbilt 579 Glider #2

UDDS		NO _x			Non-Methane Hydrocarbons (NMHC)			Carbon Monoxide (CO)		
Vehicle Test Weight (lbs)	Vehicle	Cold UDDS (g/mi)	Inter. UDDS (g/mi)	Hot UDDS (g/mi)	Cold UDDS (g/mi)	Inter. UDDS (g/mi)	Hot UDDS (g/mi)	Cold UDDS (g/mi)	Inter. UDDS (g/mi)	Hot UDDS (g/mi)
60,000	Glider #1	27.80	20.24	20.02	0.427	0.437	0.454	13.59	10.91	10.76
	Glider #2	32.42	25.01	23.55	0.613	0.388	0.397	12.32	11.16	10.85
80,000	Glider #1	36.18	27.66	27.04	0.426	0.429	0.436	17.50	15.78	14.86
	Glider #2	40.26	33.50	32.01	0.241	0.063	0.073	15.47	15.13	15.16

For the WHVC, the first cycle was a warmup and emissions were not measured. The average results for the hot start cycle are shown in Table 6. See Appendix B for additional emission results.

Table 6: WHVC Results from the 2016 MY Peterbilt 389 Glider #1 and 2017 MY Peterbilt 579 Glider #2

World Harmonized Vehicle Cycle		NOx	NMHC	CO
Vehicle Test Weight (lbs)	Vehicle	WHVC (g/mi)	WHVC (g/mi)	WHVC (g/mi)
60,000	Glider #1	16.81	0.386	9.24
	Glider #2	20.15	0.290	8.96
80,000	Glider #1	23.43	0.343	13.92
	Glider #2	26.73	0.308	11.86

The Super Cycle provided information across more driving conditions as it contains five ARB Heavy Duty Transient Cycles (HHDDT), a ten-minute idle period followed by 55 mph and 65 mph cruise periods with 0.5 mph/sec acceleration and deceleration rates. The results are shown in Table 7 for 60,000 lb and 80,000 lb loads respectively for both glider vehicles. See Appendix C for additional emission results.

Table 7: Super Cycle Results from the 2016 MY Peterbilt 389 Glider #1 and 2017 MY Peterbilt 579 Glider #2

Super Cycle		NO _x			Non-Methane Hydrocarbons (NMHC)			Carbon Monoxide (CO)		
Vehicle Test Weight (lbs)	Vehicle	ARB Transient 1 (g/mi)	ARB Transient 2 (g/mi)	55/65 Cruise (g/mi)	ARB Transient 1 (g/mi)	ARB Transient 2 (g/mi)	55/65 Cruise (g/mi)	ARB Transient 1 (g/mi)	ARB Transient 2 (g/mi)	55/65 Cruise (g/mi)
60,000	Glider #1	22.26	22.28	13.55	0.705	0.759	0.209	16.68	16.25	1.55
	Glider #2	24.94	24.92	16.64	0.603	0.620	0.157	15.61	15.48	1.41
80,000	Glider #1	29.14	28.68	25.22	0.715	0.710	0.202	21.79	21.10	2.64
	Glider #2	32.57	32.69	28.62	0.563	0.607	0.180	18.07	18.57	2.42

3.2 Particulate Matter (PM)

Particulate matter emissions were measured in triplicate to provide replicate samples for analysis. The glider vehicles emitted significantly more particulate matter than the typical heavy-duty diesel vehicles tested in the laboratory. Therefore, using our typical dilution rates and filter face velocity settings, the filters were overloaded with particulate matter during our initial testing with Glider #1. This caused a PM equipment alarm during phase 2 of the Super Cycle and therefore phases 3 and 4 were not sampled. A picture of the filters is show in Figure 9. Several iterations were performed with different filter face velocity and dilution ratio settings to address

the issue. In the end, the filter face velocity was decreased from 100 cm/s to 65 cm/s and a secondary dilution flow was added at 4:1.



Figure 9: PM Filters from Glider #1 testing over the Super Cycle Test²

The PM results for each of the test cycles at both test weights for both glider vehicles are shown in Table 8 through Table 10. Each value in the tables reflects the average of all tests for a given vehicle and configuration. The values for Glider #1 only include the emission values for the tests with the check engine light issue fixed. See Appendix A, B, and C for the results from the individual tests, including the Glider #1 tests before the check engine light issue was resolved.

Table 8: UDDS PM Emissions from the 2016 MY Peterbilt 389 Glider #1 and 2017 MY Peterbilt 579 Glider #2

UDDS		Particulate Matter		
Vehicle Test Weight (lbs)	Vehicle	Cold UDDS (mg/mi)	Inter. UDDS (mg/mi)	Hot UDDS (mg/mi)
60,000	Glider #1	500	567	602
	Glider #2	349	371	370
80,000	Glider #1	742	778	737
	Glider #2	451	445	434

² A1: Phase 1, hot start ARB Transient cycle; A2: Phase 2, four hot running ARB Transient cycles; A3: 10 minutes of measured idle; A4: 55/65 mph cruise. The PM sampling equipment shut down at phase 2 so filters A3 and A4 were not collecting PM.

Table 9: WHVC PM Emissions from the 2016 MY Peterbilt 389 Glider #1 and 2017 MY Peterbilt 579 Glider #2

World Harmonized Vehicle Cycle		Particulate Matter
Vehicle Test Weight (lbs)	Vehicle	WHVC (mg/mi)
60,000	Glider #1	560
	Glider #2	349
80,000	Glider #1	745
	Glider #2	426

Table 10: Super Cycle PM Emissions from the 2016 MY Peterbilt 389 Glider #1 and 2017 MY Peterbilt 579 Glider #2

Super Cycle		Particulate Matter		
Vehicle Test Weight (lbs)	Vehicle	ARB Transient 1 (mg/mi)	ARB Transient 2 (mg/mi)	55/65 Cruise (mg/mi)
60,000	Glider #1	1028	997	177
	Glider #2	653	677	78
80,000	Glider #1	1340	1288	169
	Glider #2	701	705	90

3.3 Conversion of Distance Specific Emissions to Engine Work Specific Emissions

NOx, PM, CO, and HC emissions from highway heavy-duty diesel vehicles are controlled through EPA emission standards based on engine dynamometer testing using engine test cycles. There are various ways to estimate engine work from vehicle testing. The most common is to use engine reported speed and torque to calculate power. This methodology works well for modern engines where the engine’s reference torque is known. Since the reference torque was not known for this engine, the engine work was estimated by using the chassis dynamometer target coefficients and the simulated vehicle mass, along with estimates for driveline efficiency.

To calculate the axle power, a modified version of Equation 1 in 40 CFR 1066.210 was used as shown in Equation A below.³ This equation was modified in two ways. The first was multiplying the equation by vehicle speed to calculate power instead of force. The second

³ See https://ecfr.io/Title-40/se40.37.1066_1210 for the description of the equation and units.

modification was removing the road grade terms from the equation since none of the cycles tested included road grade.

$$P_{\text{wheel},i} = \left(A + B \cdot v_i + C \cdot v_i^2 + M_e \cdot \frac{v_i - v_{i-1}}{t_i - t_{i-1}} \right) \cdot v_i, \text{ Eq. A}$$

Equation B was used to calculate engine power from wheel power. For this equation the axle and transmission efficiencies were estimated to be 94 percent. These values were based on the 2018 baseline data from the Heavy-Duty Greenhouse Gas and Fuel Efficiency Standards - Phase 2 rule.

$$P_{\text{engine},i} = \frac{P_{\text{wheel},i}}{0.94^2}, \text{ Eq. B}$$

All of the points where engine power was below zero were set to zero before the power was integrated to calculate work. This was done to be consistent with how work specific emissions are calculated in 40 CFR part 1065. Finally, all the tests and phases where the vehicle, configuration, and vehicle speed trace were the same, were averaged together. This was done because the only source of variation for this analysis is the slight changes in driven vehicle speed from test to test. The coefficient of variation was typically below 2 percent for the tests, which is below other sources of error that could influence this analysis to calculate engine work from chassis dynamometer tests. Table 11 contains a summary of the conversion rates for the glider vehicles.

Table 11: Summary of vehicle miles per engine horsepower-hour

Glider Vehicle	Test Weight (pounds)	WHVC Phase 1	HD UDDS Phase 1, 2 and 3	Super Cycle Phase 1 and 2	Super Cycle Phase 4
miles / (hp-hr)					
#1	60,000	0.321	0.293	0.271	0.362
#1	80,000	0.224	0.201	0.189	0.228
#2	60,000	0.320	0.286	0.266	0.362
#2	80,000	0.219	0.198	0.188	0.229

This analysis estimates the engine work from chassis dynamometer testing and does not take into account a number of additional sources of load on the engine. Two of these sources are the engine accessory load and the additional power from when the engine is idling at a higher speed during warm-up.

3.4 Simulated HD Federal Test Procedure and Supplemental Emission Test Results

The on-highway heavy-duty engine emission standards are in grams per horsepower-hour based on engine test cycles. The current exhaust emissions standards for heavy-duty engines are 0.2 g/hp-hr for NO_x, 0.01 g/hp-hr for PM, 15.5 g/hp-hr for CO, and 0.14 g/hp-hr for NMHC.⁴ The emission standards are evaluated over a transient cycle, the Heavy-Duty Federal Test Procedure (HD Engine FTP) cycle, and a steady-state cycle.

To conduct a rough comparison of the emissions over a transient cycle to the engine emissions standards, we calculated the estimated NO_x, PM, CO, and NMHC emissions in grams per horsepower-hour using the conversion rates shown in Table 11. The comparison was limited to the chassis test results from the UDDS cycle because this is the vehicle cycle that was used originally to create the HD Engine FTP cycle. As shown in Table 12 and Table 13, the estimated NO_x and PM emissions results are significantly higher than the model year 2010 and later on-highway heavy-duty diesel emission standards, and are more typical of the emission results expected from an on-highway heavy-duty diesel engine built between model years 1998 and 2002.

Table 12: Estimated Grams of NO_x and NMHC per Horsepower-Hour Results over the UDDS Cycle for 2016 MY Peterbilt 389 Glider #1 and 2017 MY Peterbilt 579 Glider #2

UDDS		NO _x			Non-Methane Hydrocarbons (NMHC)		
Vehicle Test Weight (lbs)	Vehicle	Cold UDDS (g/hp-hr)	Inter. UDDS (g/hp-hr)	Hot UDDS (g/hp-hr)	Cold UDDS (g/hp-hr)	Inter. UDDS (g/hp-hr)	Hot UDDS (g/hp-hr)
60,000	Glider #1	8.15	5.93	5.87	0.125	0.128	0.133
	Glider #2	9.27	7.15	6.74	0.175	0.111	0.114
80,000	Glider #1	7.27	5.56	5.44	0.086	0.086	0.088
	Glider #2	7.97	6.63	6.34	0.048	0.013	0.015

⁴ See 40 CFR 86.007-11 for emission standards and supplemental requirements for 2007 and later model year diesel heavy-duty engines and vehicles.

Table 13: Estimated Grams of CO and PM per Horsepower-Hour Results over the UDDS Cycle for 2016 MY Peterbilt 389 Glider #1 and 2017 MY Peterbilt 579 Glider #2

UDDS		Carbon Monoxide (CO)			Particulate Matter		
Vehicle Test Weight (lbs)	Vehicle	Cold UDDS (g/hp-hr)	Inter. UDDS (g/hp-hr)	Hot UDDS (g/hp-hr)	Cold UDDS (g/hp-hr)	Inter. UDDS (g/hp-hr)	Hot UDDS (g/hp-hr)
60,000	Glider #1	3.98	3.20	3.15	0.146	0.166	0.176
	Glider #2	3.52	3.19	3.10	0.100	0.106	0.106
80,000	Glider #1	3.52	3.17	2.99	0.217	0.228	0.216
	Glider #2	3.06	3.00	3.00	0.089	0.088	0.086

Chassis testing of Glider #2 was also conducted to simulate the engine-based steady state cycle, the Supplemental Emission Test (SET), as discussed in Section 2.4. The simulation was conducted by running a series of steady-state cycles with varying grade using the mass and road load coefficients of the 80,000 pound vehicle. The engine power for each SET test point was determined using the method defined in Section 3.3 and the corresponding speed and torque values are shown in Table 14.

Table 14: Engine Speed and Torque at SET Test Points

Test Point	Engine Speed (rpm)	Engine Torque (Nm)
A100	1262	2302
A75	1262	1783
A50	1263	1251
A25	1262	716
B100	1440	2371
B75	1440	1831
B50	1440	1289
B25	1440	732
C100	1610	2255
C75	1648	1764
C50	1648	1249
C25	1648	722
Idle	600	0

The overall emission test results from the SET are shown in Table 15. For the “idle” test point of the SET, the idle results from the 3rd phase of the Super Cycle were used. The NO_x emissions are consistent with the results of the UDDS but the CO and PM emissions are measurably lower. This is not surprising since the transient CO and PM emissions are likely a result of poor air fuel ratio control and mixing during transient operation when compared to the steady-state operation that the SET captures.

Table 15: Glider #2 Simulated SET Results

Test Point	THC (g/hp-hr)	CO (g/hp-hr)	NOx (g/hp-hr)	N2O (g/hp-hr)	CH4 (g/hp-hr)	NMHC (g/hp-hr)	PM (g/hp-hr)
A100	0.0382	1.3560	6.817	0.00166	0	0.0399	0.028
A75	0.0343	0.8307	6.540	0.00177	0.00030	0.0355	0.016
A50	0.0320	0.5130	6.369	0.00205	0	0.0338	0.017
A25	0.0578	0.3805	6.001	0.00285	0	0.0607	0.019
B100	0.0375	0.7036	6.996	0.00180	0	0.0395	0.027
B75	0.0359	0.4510	7.379	0.00193	0.0002	0.0380	0.017
B50	0.0333	0.3316	6.880	0.00215	0	0.0351	0.015
B25	0.0569	0.3850	5.733	0.00296	0	0.0599	0.024
C100	0.0361	0.3926	6.020	0.00211	0	0.0385	0.040
C75	0.0394	0.2950	7.236	0.00226	0	0.0420	0.028
C50	0.0405	0.2648	6.594	0.00254	0	0.0427	0.024
C25	0.0635	0.3939	5.997	0.00340	0	0.0666	0.031
Idle*	5.002	23.72	113.5	0.0690	0.018	5.0127	0.175
Weighted 40 CFR 86.1362	0.0446	0.6182	6.73	0.00219	7.53E-05	0.0467	0.025
*Idle emissions are in (grams/hr)							

4. Comparison to other HD Vehicle Emission Performance

The emission results from the glider vehicles were compared to two other recent model year tractors. The vehicle specifics of these two other tractors are listed below.

- The day cab tractor tested was a 2015 MY International Day Cab with over 10,000 miles. The vehicle contained a 2015 MY Cummins ISX 600 HP engine, an Eaton 13 speed automated manual transmission, and a 3.55 rear axle ratio.
- The sleeper cab tractor tested was a 2014 MY Freightliner Cascadia with 362,652 miles. The vehicle contained a 2014 MY Detroit Diesel DD-15 505 HP engine, an Eaton 10 speed manual transmission, and a 3.55 rear axle ratio.

A principle difference between these vehicles and the 2016 MY Peterbilt 389 and 2017 MY Peterbilt 579 glider vehicles are the engines. The glider vehicles use a rebuilt engine that was originally manufactured in the 1998-2002 timeframe, while the two comparison vehicles have engines certified to the 2014 MY and 2015 MY EPA emissions standards and utilize cooled exhaust gas recirculation (EGR), diesel particulate filters, and selective catalytic reduction (SCR) systems.

All of the tractors were tested in the same HD chassis dynamometer cell as the glider vehicles. The target road load coefficients for the International day cab matched the glider vehicles when tested at 60,000 pounds. The target road loads of the Freightliner sleeper cab matched the glider vehicles when tested at 80,000 pounds. This means that the comparisons reflect differences observed for the drivetrain (engine, transmission, and axle) of the vehicles, but do not account for differences associated with the vehicles' aerodynamics or tire performance. The road load coefficients for both of these vehicles are show in Table 16.

Table 16: Road Load Coefficients

Configuration	Target Coefficients			Set Coefficients		
	A (lbf)	B (lbf/mph)	C (lbf/mph ²)	A (lbf)	B (lbf/mph)	C (lbf/mph ²)
2015 MY International Day Cab, 60k Test Weight	345.090	0.0000	0.15380	75.100	-0.7408	0.143200
2014 MY Freightliner Sleeper Cab, 80k Test Weight	446.350	7.76060	0.14780	294.170	6.0668	0.139900

As shown in the following figures, we compared the emission rates from the gliders to that of the comparable tractor configuration. The glider results in the figures represent the average of all of the tests for a given vehicle configuration, excluding the tests with the MIL on for Glider #1.⁵ Figure 10 through Figure 13 compare the 2016 MY and 2017 MY Peterbilt Gliders at 60,000 pound test weight to the 2015 MY International Day Cab at the same test weight and road load coefficients over the Super Cycle. Figure 14 through Figure 17 show the emission rate differences between the 2016 MY and 2017 MY Peterbilt Gliders at 80,000 pound test weight to the 2014 MY Freightliner Sleeper Cab at the same test weight and road load coefficients over the ARB Transient Cycle.

The NO_x, CO, THC, and PM emissions from the glider vehicles were significantly higher than the newer model year tractors over all cycles.

⁵ See Appendix A, B, and C for the emission rates before and after the repair.

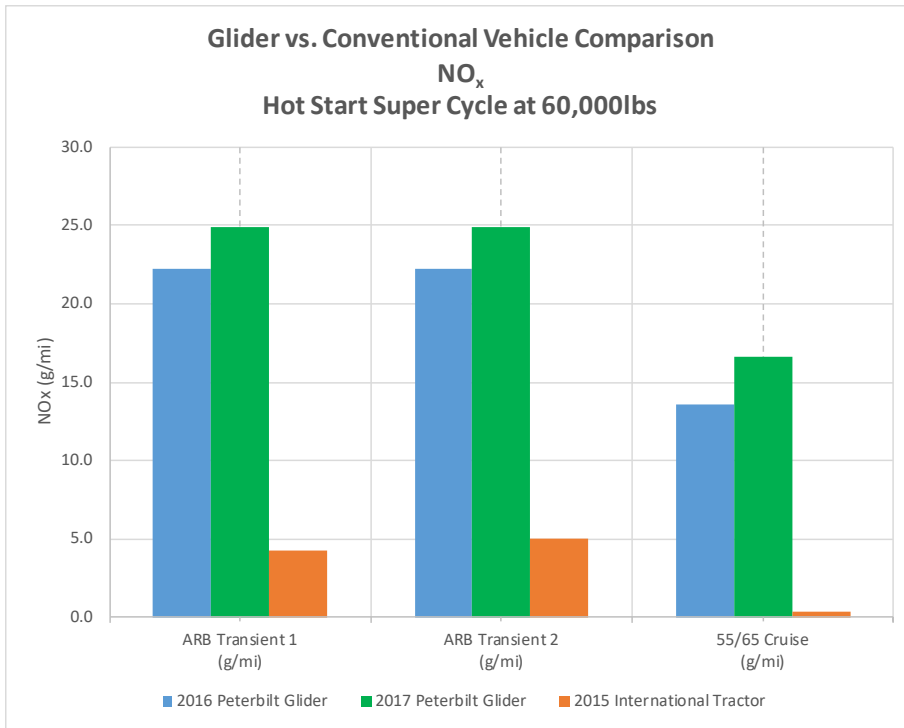


Figure 10: NO_x Emissions Comparison of 2015 MY Day Cab to the 2016 MY Peterbilt 389 Glider #1 and 2017 MY Peterbilt 579 Glider #2 over the Super Cycle

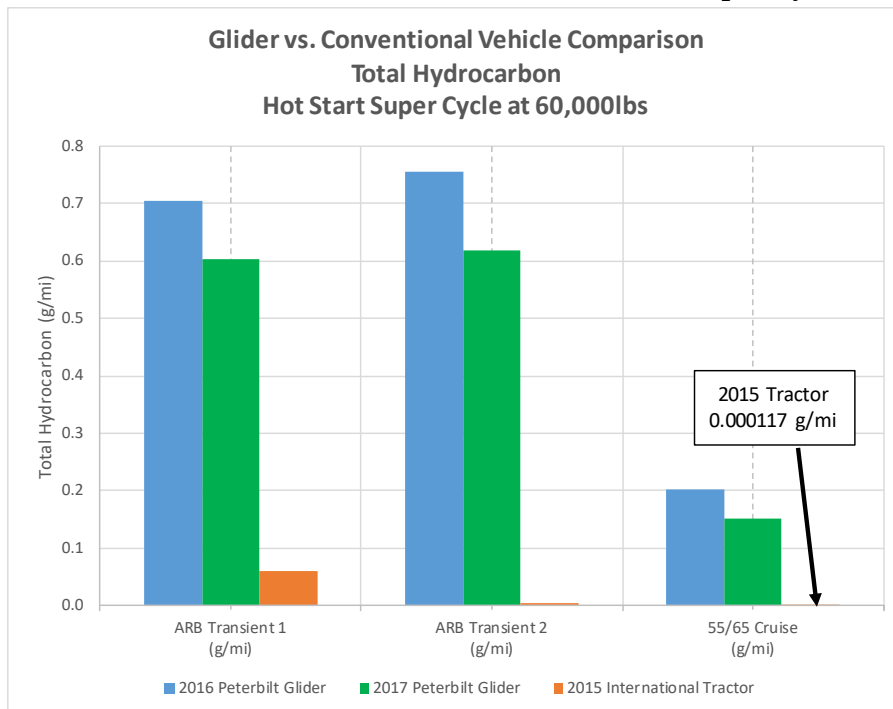


Figure 11: THC Emissions Comparison of 2015 MY International Tractor to the 2016 MY Peterbilt 389 Glider #1 and 2017 MY Peterbilt 579 Glider #2 over the Super Cycle

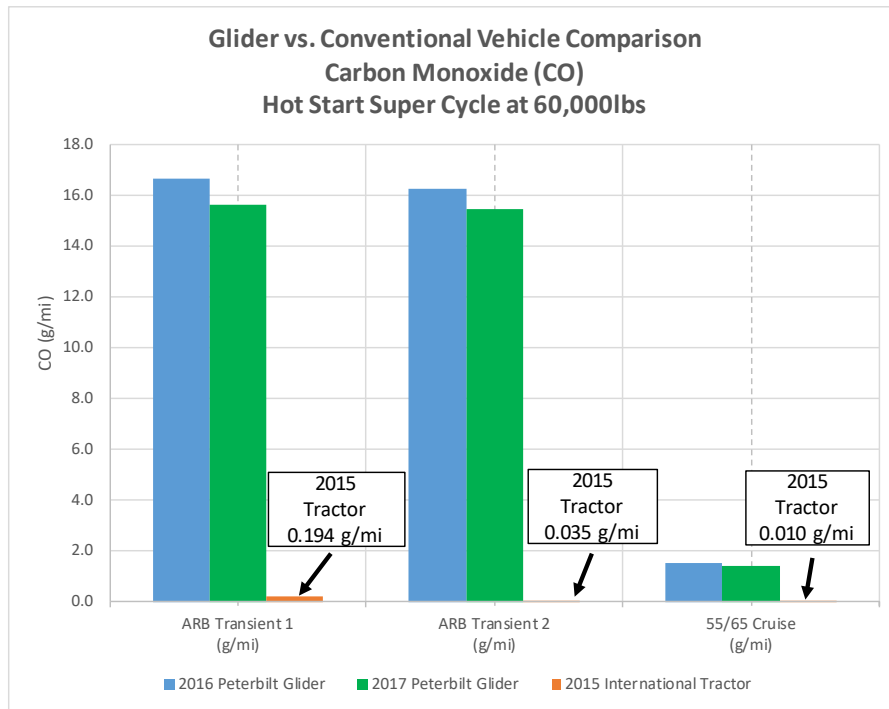


Figure 12: CO Emissions Comparison of 2015 MY Day Cab to the 2016 MY Peterbilt 389 Glider #1 and 2017 MY Peterbilt 579 Glider #2 over the Super Cycle

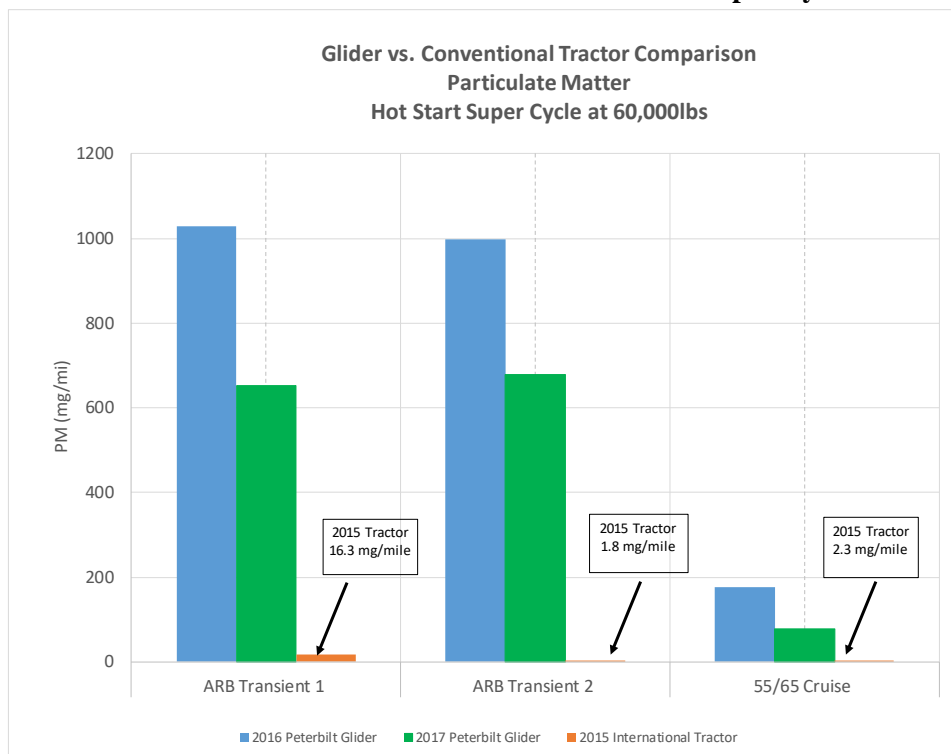


Figure 13: PM Emissions Comparison of 2015 MY Day Cab to the 2016 MY Peterbilt 389 Glider #1 and 2017 MY Peterbilt 579 Glider #2 over the Super Cycle

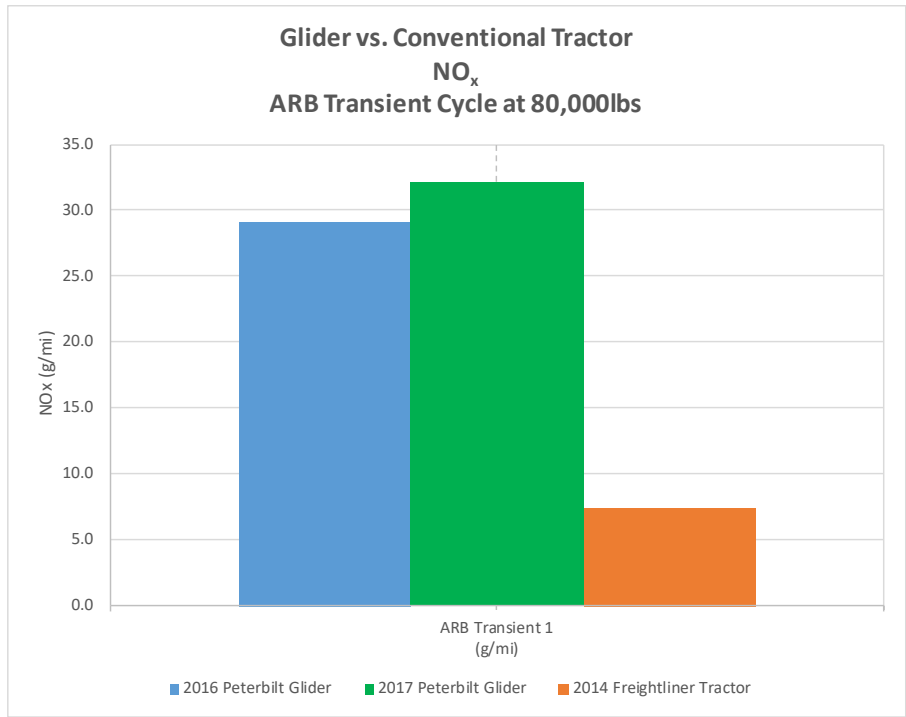


Figure 14: NO_x Emissions Comparison of 2014 MY Freightliner to the 2016 MY Peterbilt 389 Glider #1 and 2017 MY Peterbilt 579 Glider #2 over the ARB Transient Cycle

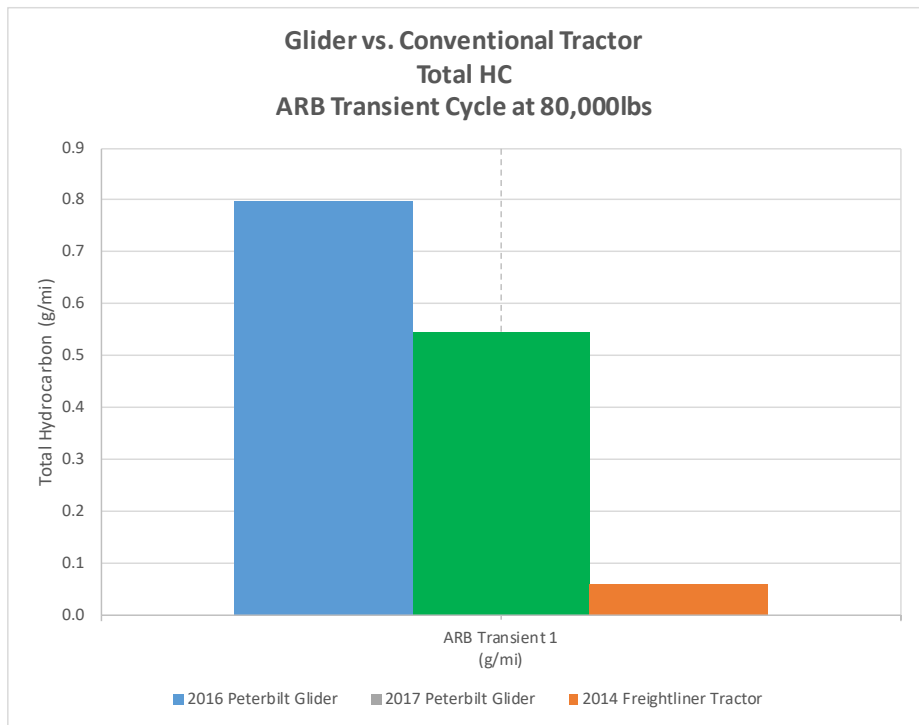


Figure 15: HC Emissions Comparison of 2014 MY Freightliner to the 2016 MY Peterbilt 389 Glider #1 and 2017 MY Peterbilt 579 Glider #2 over the ARB Transient Cycle

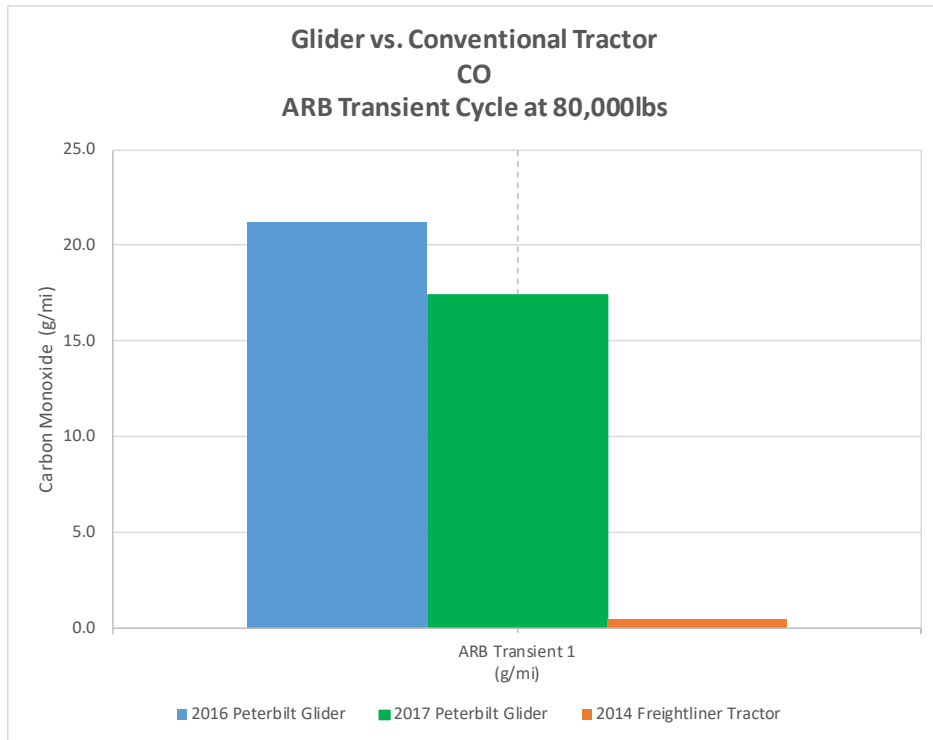


Figure 16: CO Emissions Comparison of 2014 MY Freightliner to the 2016 MY Peterbilt 389 Glider #1 and 2017 MY Peterbilt 579 Glider #2 over the ARB Transient Cycle

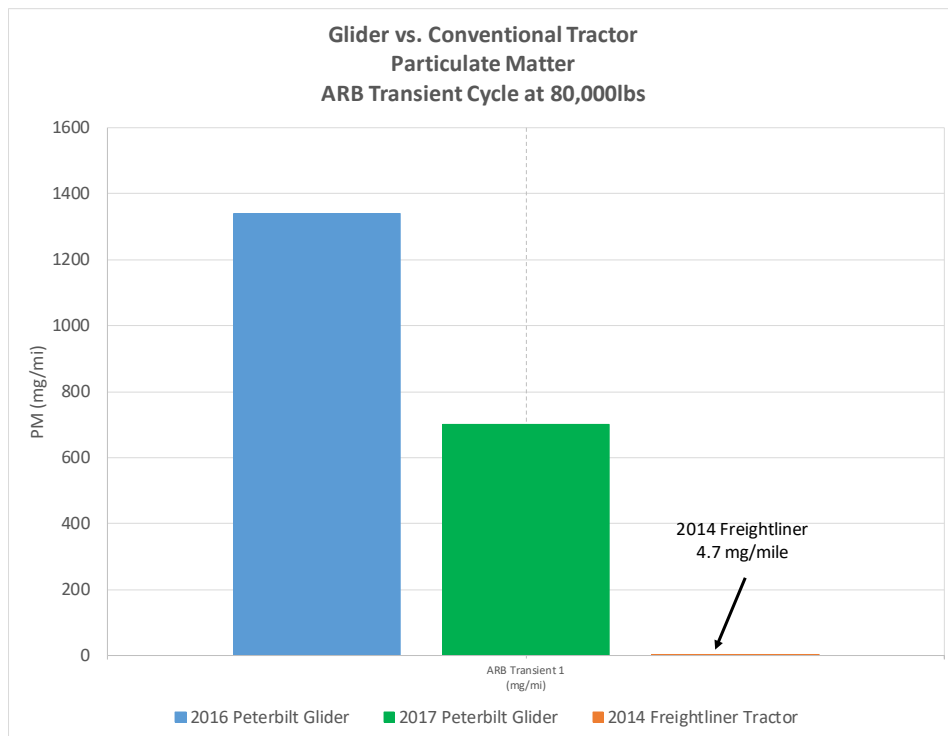


Figure 17: PM Emissions Comparison of 2014 MY Freightliner to the 2016 MY Peterbilt 389 Glider #1 and 2017 MY Peterbilt 579 Glider #2 over the ARB Transient Cycle

We also compared the CO₂ emissions of the Peterbilt 389 and Peterbilt 579 glider vehicles to the International and Freightliner conventional tractors. CO₂ emissions are directly proportional to the road load of the vehicle. Because we did not measure the actual road load of the vehicles, we used the same target road load coefficients in the two sets of comparisons (at 60,000 and 80,000 pounds). Therefore, this comparison only evaluates the performance of the powertrain and may not be representative of the difference in CO₂ emission that these vehicles would experience in-use. Figure 18 and Figure 19 show comparisons of the powertrain performance. In all cases, the CO₂ emissions were lower in the glider powertrains. This is not unexpected given the known trade-off between NO_x and CO₂ emissions with respect to injection timing and similar engine calibration techniques and the relatively higher NO_x emissions for the 2016 MY Peterbilt 389 and 2017 MY Peterbilt 579 glider vehicles shown in the previous tables and figures.

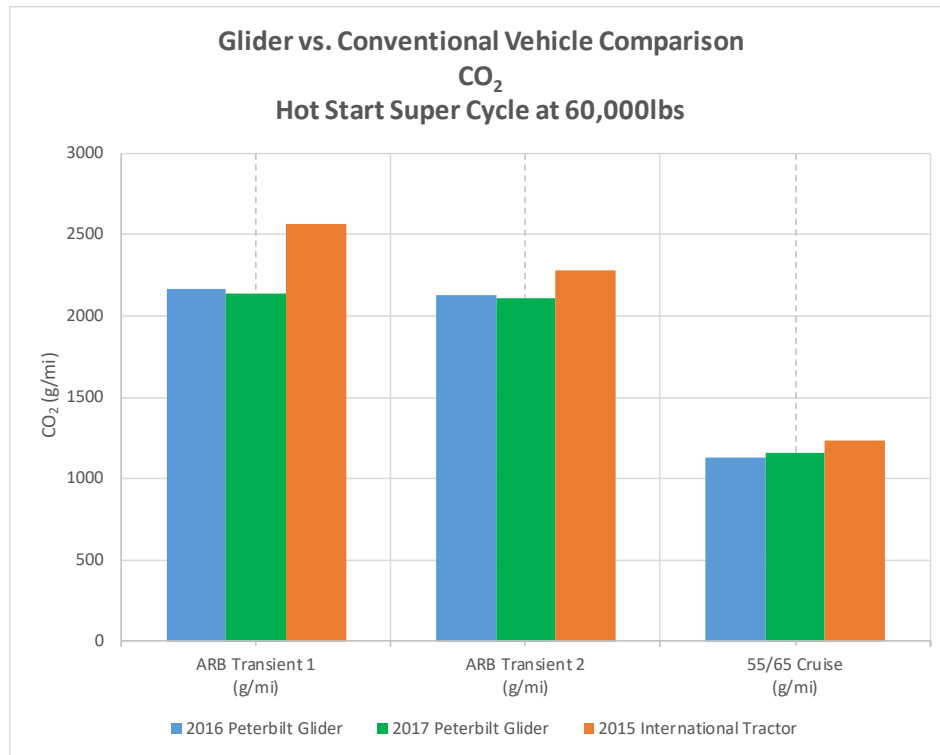


Figure 18: CO₂ Emissions Comparison of 2015 MY International to the 2016 MY Peterbilt 389 Glider #1 and 2017 MY Peterbilt 579 Glider #2 over the Super Cycle

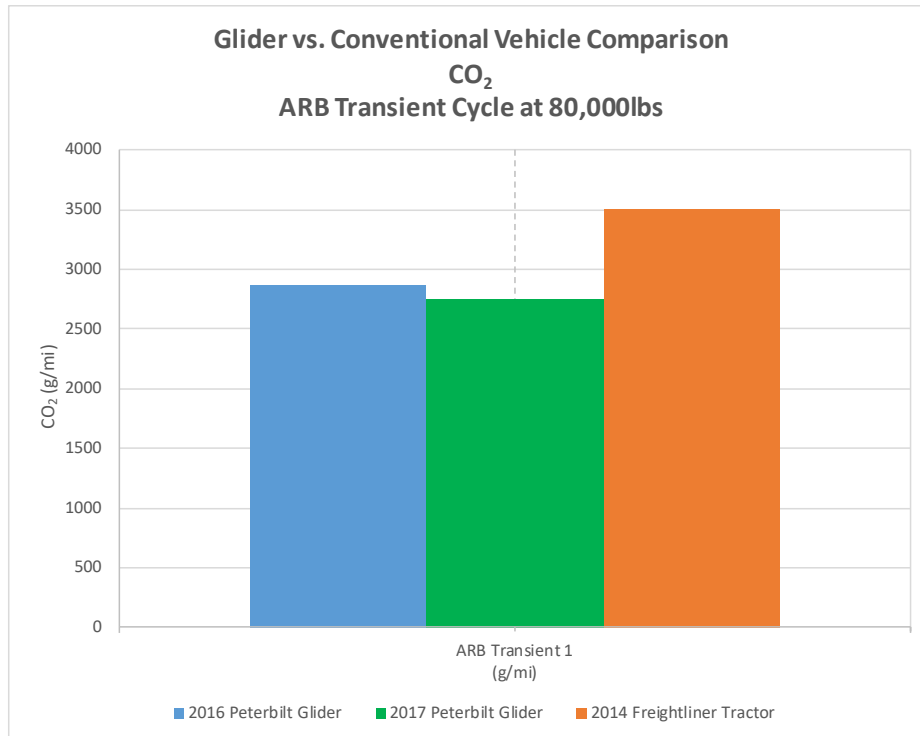


Figure 19: CO₂ Emissions Comparison of 2014 MY Freightliner to the 2016 MY Peterbilt 389 Glider #1 and 2017 MY Peterbilt 579 Glider #2 over the ARB Transient Cycle

Glider #1 2016 MY Peterbilt 389

Test Type	Vehicle Number Test Weight (lbs)	Test Number	Date	Total HC			NMHC		
				Glider #1 Cold UDDS (g/mi)	Glider #1 Inter. UDDS (g/mi)	Glider #1 Hot UDDS (g/mi)	Glider #1 Cold UDDS (g/mi)	Glider #1 Inter. UDDS (g/mi)	Glider #1 Hot UDDS (g/mi)
Cold Start UDDS	Glider #1 60,000 lb Test Wt.	1	10/6	0.630	0.664	0.487	0.561	0.606	0.491
		2	10/10	0.551	0.608	0.501	0.476	0.590	0.508
		3*	10/16	0.402	0.417	0.415	0.407	0.422	0.421
		4*	10/17	0.443	0.447	0.481	0.447	0.452	0.488
Cold Start UDDS	Glider #1 80,000 lb Test Wt.	1	10/12	0.569	0.527	0.427	0.545	0.509	0.435
		2	10/13	0.399	0.411	0.379	0.407	0.421	0.389
		3*	10/18	0.437	0.431	0.414	0.445	0.439	0.424
		4*	10/19	0.400	0.413	0.438	0.407	0.420	0.448
* Check Engine Light issue resolved prior to this test									

Test Type	Vehicle Number Test Weight (lbs)	Test Number	Date	CH ₄			CO		
				Glider #1 Cold UDDS (g/mi)	Glider #1 Inter. UDDS (g/mi)	Glider #1 Hot UDDS (g/mi)	Glider #1 Cold UDDS (g/mi)	Glider #1 Inter. UDDS (g/mi)	Glider #1 Hot UDDS (g/mi)
Cold Start UDDS	Glider #1 60,000 lb Test Wt.	1	10/6	0.051	0.045	0.001	36.4	28.5	16.2
		2	10/10	0.050	0.022	0.000	36.0	23.8	14.2
		3*	10/16	0.000	0.000	0.000	13.9	11.1	10.3
		4*	10/17	0.000	0.000	0.000	13.3	10.7	11.2
Cold Start UDDS	Glider #1 80,000 lb Test Wt.	1	10/12	0.034	0.028	0.000	31.1	30.6	16.7
		2	10/13	0.002	0.000	0.000	19.7	16.1	17.4
		3*	10/18	0.000	0.000	0.000	16.1	15.2	15.4
		4*	10/19	0.000	0.000	0.000	18.9	16.3	14.4
* Check Engine Light issue resolved prior to this test									

Test Type	Vehicle Number Test Weight (lbs)	Test Number	Date	NO _x			N ₂ O		
				Glider #1 Cold UDDS (g/mi)	Glider #1 Inter. UDDS (g/mi)	Glider #1 Hot UDDS (g/mi)	Glider #1 Cold UDDS (g/mi)	Glider #1 Inter. UDDS (g/mi)	Glider #1 Hot UDDS (g/mi)
Cold Start UDDS	Glider #1 60,000 lb Test Wt.	1	10/6	33.4	31.6	24.2	0.016	0.014	0.014
		2	10/10	32.3	31.5	20.6	0.016	0.014	0.013
		3*	10/16	28.4	20.0	20.3	0.019	0.017	0.014
		4*	10/17	27.2	20.5	19.8	0.018	0.016	0.015
Cold Start UDDS	Glider #1 80,000 lb Test Wt.	1	10/12	42.5	35.1	28.1	0.020	0.021	0.018
		2	10/13	36.5	28.3	28.2	0.017	0.016	0.015
		3*	10/18	36.2	27.7	27.2	0.020	0.017	0.017
		4*	10/19	36.2	27.7	26.9	0.019	0.017	0.016
* Check Engine Light issue resolved prior to this test									
Test Type	Vehicle Number Test Weight (lbs)	Test Number	Date	CO ₂			Fuel Economy		
				Glider #1 Cold UDDS (g/mi)	Glider #1 Inter. UDDS (g/mi)	Glider #1 Hot UDDS (g/mi)	Glider #1 Cold UDDS (mpg)	Glider #1 Inter. UDDS (mpg)	Glider #1 Hot UDDS (mpg)
Cold Start UDDS	Glider #1 60,000 lb Test Wt.	1	10/6	2002	1838	1807	4.94	5.40	5.55
		2	10/10	2066	1881	1854	4.79	5.30	5.42
		3*	10/16	1990	1818	1779	5.05	5.54	5.67
		4*	10/17	1991	1804	1816	5.05	5.58	5.54
Cold Start UDDS	Glider #1 80,000 lb Test Wt.	1	10/12	2595	2493	2447	3.85	4.00	4.11
		2	10/13	2664	2425	2413	3.77	4.15	4.17
		3*	10/18	2602	2465	2449	3.87	4.09	4.11
		4*	10/19	2677	2478	2432	3.76	4.06	4.14
* Check Engine Light issue resolved prior to this test									

Glider #2 2017 MY Peterbilt 579

Test Type	Vehicle Number Test Weight (lbs)	Test Number	Date	Total HC			NMHC		
				Glider #2 Cold UDDS (g/mi)	Glider #2 Inter. UDDS (g/mi)	Glider #2 Hot UDDS (g/mi)	Glider #2 Cold UDDS (g/mi)	Glider #2 Inter. UDDS (g/mi)	Glider #2 Hot UDDS (g/mi)
Cold Start UDDS	Glider #2 60,000 lb Test	1	11/3	0.603	0.363	0.377	0.605	0.370	0.384
		2	11/6	0.621	0.401	0.405	0.621	0.406	0.411
Cold Start UDDS	Glider #2 80,000 lb Test	1	11/7	0.236	0.056	0.064	0.241	0.063	0.073

Test Type	Vehicle Number Test Weight (lbs)	Test Number	Date	CH ₄			CO		
				Glider #2 Cold UDDS (g/mi)	Glider #2 Inter. UDDS (g/mi)	Glider #2 Hot UDDS (g/mi)	Glider #2 Cold UDDS (g/mi)	Glider #2 Inter. UDDS (g/mi)	Glider #2 Hot UDDS (g/mi)
Cold Start UDDS	Glider #2 60,000 lb Test	1	11/3	0.004	0.000	0.000	11.4	11.1	9.4
		2	11/6	0.005	0.000	0.000	13.2	11.2	12.3
Cold Start UDDS	Glider #2 80,000 lb Test	1	11/7	0.006	0.000	0.000	15.5	15.1	15.2

Test Type	Vehicle Number Test Weight (lbs)	Test Number	Date	NO _x			N ₂ O		
				Glider #2 Cold UDDS (g/mi)	Glider #2 Inter. UDDS (g/mi)	Glider #2 Hot UDDS (g/mi)	Glider #2 Cold UDDS (g/mi)	Glider #2 Inter. UDDS (g/mi)	Glider #2 Hot UDDS (g/mi)
Cold Start UDDS	Glider #2 60,000 lb Test	1	11/3	32.8	25.3	23.5	0.018	0.022	0.013
		2	11/6	32.0	24.7	23.6	0.014	0.010	0.010
Cold Start UDDS	Glider #2 80,000 lb Test	1	11/7	40.3	33.5	32.0	0.013	0.010	0.010

Test Type	Vehicle Number Test Weight (lbs)	Test Number	Date	CO ₂			Fuel Economy		
				Glider #2 Cold UDDS (g/mi)	Glider #2 Inter. UDDS (g/mi)	Glider #2 Hot UDDS (g/mi)	Glider #2 Cold UDDS (mpg)	Glider #2 Inter. UDDS (mpg)	Glider #2 Hot UDDS (mpg)
Cold Start UDDS	Glider #2 60,000 lb Test	1	11/3	1962	1868	1801	5.13	5.39	5.60
		2	11/6	2035	1855	1856	4.95	5.43	5.42
Cold Start UDDS	Glider #2 80,000 lb Test	1	11/7	2640	2493	2460	3.82	4.04	4.10

PM Results

The values in the table represent an average of the PM collected on three filters. The PM emission data was not collected for all tests due to power issues in the laboratory during the time of testing which affected the PM sampler. Those tests for which the PM sample system was not operating are indicated with a “N/A”.

Test Type	Vehicle Test Weight (lbs)	Test Number	Date	PM		
				Cold UDDS (mg/mi)	Inter. UDDS (mg/mi)	Hot UDDS (mg/mi)
Cold Start UDDS	Glider #1 60,000 lb	1	10/6	1472	1491	813
		2	10/10	N/A	N/A	N/A
		3*	10/16	479	580	542
		4*	10/17	521	554	662
	Glider #2 60,000 lb	1	11/3	323	363	310
		2	11/6	375	379	431
		3	11/14	N/A	N/A	N/A
Cold Start UDDS	Glider#1 80,000 lb	1	10/12	1419	1622	916
		2*	10/13	706	706	674
		3*	10/18	N/A	N/A	N/A
		4*	10/19	778	849	800
	Glider #2 80,000 lb	1	11/7	490	473	466
		2	11/8	413	433	402
		3	11/13	450	427	432
* Check Engine Light issue resolved prior to these tests						

Glider #1 2016 MY Peterbilt 389

Test Type	Vehicle Number Test Weight (lbs)	Test Number	Date	Total HC (g/mi)	NMOG (g/mi)	NMHC (g/mi)	CH4 (g/mi)	CO (g/mi)	Nox (g/mi)	N2O (g/mi)	CO2 (g/mi)	Fuel Economy (mpg)
Hot Start WHVC	Glider #1 60,000 lb Test Wt.	1	10/5	0.431	0.435	0.435	0.000	8.65	17.3	0.0123	1505	6.69
		2	10/6	0.391	0.397	0.397	0.000	10.21	16.9	0.0109	1561	6.45
		3	10/10	0.410	0.397	0.397	0.004	16.82	25.4	0.0099	1506	6.63
		4*	10/16	0.373	0.377	0.377	0.000	8.94	16.8	0.0128	1560	6.46
		5*	10/17	0.392	0.395	0.395	0.000	9.55	16.8	0.0130	1577	6.38
Hot Start WHVC	Glider #1 80,000 lb Test	1	10/11	0.332	0.336	0.336	0.000	13.14	24.2	0.0128	2105	4.78
		2*	10/13	0.347	0.350	0.350	0.000	14.70	22.7	0.0145	2132	4.72

Glider #2 2017 MY Peterbilt 579

Test Type	Vehicle Number Test Weight (lbs)	Test Number	Date	Total HC (g/mi)	NMOG (g/mi)	NMHC (g/mi)	CH4 (g/mi)	CO (g/mi)	Nox (g/mi)	N2O (g/mi)	CO2 (g/mi)	Fuel Economy (mpg)
Hot Start WHVC	Glider #2 60,000 lb Test	1	11/3	0.285	0.288	0.288	0.000	8.79	20.0	0.0068	1553	6.49
		2	11/6	0.289	0.291	0.291	0.000	9.12	20.2	0.0076	1552	6.49
Hot Start WHVC	Glider #2 80,000 lb Test	1	11/7	0.298	0.300	0.300	0.000	12.85	26.4	0.0082	2157	4.67
		2	11/8	0.313	0.316	0.316	0.000	10.87	27.1	0.0101	2152	4.69

PM Results

The values in the table represent an average of the PM collected on three filters. The PM emission data was not collected for all tests due to power issues in the laboratory during the time of testing which affected the PM sampler. Those tests for which the PM sample system was not operating are indicated with a “N/A”.

Test Type	Vehicle Test Weight (lbs)	Test Number	Date	PM
				WHVC (mg/mi)
Hot Start WHVC	Glider #1 60,000 lb	1	10/5	543
		2	10/6	622
		3	10/10	N/A
		4*	10/16	530
		5*	10/17	591
	Glider #2 60,000 lb	1	11/3	367
		2	11/6	331
Hot Start WHVC	Glider #1 80,000 lb	1	10/11	627
		2*	10/13	745
Hot Start WHVC	Glider #2 80,000 lb	1	11/7	433
		2	11/8	419

* Check Engine Light issue resolved prior to these tests

Glider #1 2016 MY Peterbilt 389

Test Type	Vehicle Number Test Weight (lbs)	Test Number	Date	Total HC			NMHC		
				Glider #1 ARB Transient 1 (g/mi)	Glider #1 ARB Transient 2 (g/mi)	Glider #1 55/65 Cruise (g/mi)	Glider #1 ARB Transient 1 (g/mi)	Glider #1 ARB Transient 2 (g/mi)	Glider #1 55/65 Cruise (g/mi)
Hot Start SC	Glider #1 60,000 lb Test Wt.	1	10/5	0.822	0.753	0.207	0.823	0.756	0.214
		2	10/6	0.611	0.723	0.201	0.611	0.726	0.208
		3	10/10	0.794	0.740	0.201	0.765	0.742	0.208
		4*	10/16	0.683	0.753	0.197	0.682	0.757	0.204
		5*	10/17	0.727	0.758	0.207	0.727	0.762	0.214
Hot Start SC	Glider #1 80,000 lb Test Wt.	1	10/11	0.608	0.648	0.168	0.609	0.653	0.178
		2	10/13	0.629	0.701	0.185	0.631	0.707	0.195
		3*	10/18	0.798	0.706	0.199	0.799	0.713	0.209

* Check Engine Light issue resolved prior to this test

Test Type	Vehicle Number Test Weight (lbs)	Test Number	Date	CH ₄			CO		
				Glider #1 ARB Transient 1 (g/mi)	Glider #1 ARB Transient 2 (g/mi)	Glider #1 55/65 Cruise (g/mi)	Glider #1 ARB Transient 1 (g/mi)	Glider #1 ARB Transient 2 (g/mi)	Glider #1 55/65 Cruise (g/mi)
Hot Start SC	Glider #1 60,000 lb Test Wt.	1	10/5	0.000	0.000	0.000	16.20	18.45	1.69
		2	10/6	0.000	0.000	0.000	20.12	21.34	1.76
		3	10/10	0.022	0.002	0.000	38.94	20.84	1.86
		4*	10/16	0.000	0.000	0.000	16.13	15.01	1.50
		5*	10/17	0.000	0.003	0.000	17.23	17.49	1.61
Hot Start SC	Glider #1 80,000 lb Test Wt.	1	10/11	0.000	0.000	0.000	22.84	24.34	2.99
		2	10/13	0.000	0.000	0.001	22.43	22.15	2.70
		3*	10/18	0.000	0.000	0.002	21.15	20.05	2.58

* Check Engine Light issue resolved prior to this test

Test Type	Vehicle Number Test Weight (lbs)	Test Number	Date	NO _x			N ₂ O		
				Glider #1 ARB Transient 1 (g/mi)	Glider #1 ARB Transient 2 (g/mi)	Glider #1 55/65 Cruise (g/mi)	Glider #1 ARB Transient 1 (g/mi)	Glider #1 ARB Transient 2 (g/mi)	Glider #1 55/65 Cruise (g/mi)
Hot Start SC	Glider #1 60,000 lb Test Wt.	1	10/5	24.4	23.8	13.3	0.016	0.014	0.005
		2	10/6	23.2	23.3	13.4	0.015	0.016	0.006
		3	10/10	35.5	26.6	13.4	0.020	0.018	0.008
		4*	10/16	22.0	22.4	13.6	0.020	0.020	0.008
		5*	10/17	22.5	22.2	13.5	0.021	0.019	0.008
Hot Start SC	Glider #1 80,000 lb Test Wt.	1	10/11	29.6	30.1	25.3	0.022	0.020	0.009
		2	10/13	29.2	28.8	25.2	0.023	0.023	0.010
		3*	10/18	29.1	28.6	25.2	0.023	0.021	0.010

* Check Engine Light issue resolved prior to this test

Test Type	Vehicle Number Test Weight (lbs)	Test Number	Date	CO ₂			Fuel Economy		
				Glider #1 ARB Transient 1 (g/mi)	Glider #1 ARB Transient 2 (g/mi)	Glider #1 55/65 Cruise (g/mi)	Glider #1 ARB Transient 1 (g/mi)	Glider #1 ARB Transient 2 (g/mi)	Glider #1 55/65 Cruise (g/mi)
Hot Start SC	Glider #1 60,000 lb Test Wt.	1	10/5	2188	2181	1121	4.59	4.60	9.05
		2	10/6	2158	2172	1141	4.64	4.61	8.90
		3	10/10	2172	2104	1139	4.55	4.76	8.90
		4*	10/16	2138	2110	1132	4.70	4.76	8.97
		5*	10/17	2200	2146	1134	4.57	4.68	8.95
Hot Start SC	Glider #1 80,000 lb Test Wt.	1	10/11	2814	2827	1750	3.57	3.55	5.80
		2	10/13	2843	2817	1757	3.53	3.57	5.77
		3*	10/18	2863	2783	1749	3.51	3.61	5.80
* Check Engine Light issue resolved prior to this test									

Glider #2 2017 MY Peterbilt 579

Test Type	Vehicle Number Test Weight (lbs)	Test Number	Date	Total HC			NMHC		
				Glider #2 ARB Transient 1 (g/mi)	Glider #2 ARB Transient 2 (g/mi)	Glider #2 55/65 Cruise (g/mi)	Glider #2 ARB Transient 1 (g/mi)	Glider #2 ARB Transient 2 (g/mi)	Glider #2 55/65 Cruise (g/mi)
Hot Start SC	Glider #2 60,000 lb Test	1	11/3	0.611	0.610	0.164	0.611	0.612	0.171
		2	11/6	0.596	0.626	0.137	0.595	0.628	0.143
Hot Start SC	Glider #2 80,000 lb Test	1	11/7	0.544	0.596	0.162	0.547	0.605	0.170
		2	11/8	0.578	0.601	0.180	0.579	0.609	0.189

Test Type	Vehicle Number Test Weight (lbs)	Test Number	Date	CH ₄			CO		
				Glider #2 ARB Transient 1 (g/mi)	Glider #2 ARB Transient 2 (g/mi)	Glider #2 55/65 Cruise (g/mi)	Glider #2 ARB Transient 1 (g/mi)	Glider #2 ARB Transient 2 (g/mi)	Glider #2 55/65 Cruise (g/mi)
Hot Start SC	Glider #2 60,000 lb Test	1	11/3	0.000	0.001	0.000	15.32	16.00	1.49
		2	11/6	0.000	0.001	0.001	15.90	14.96	1.34
Hot Start SC	Glider #2 80,000 lb Test	1	11/7	0.000	0.000	0.003	17.41	18.31	2.70
		2	11/8	0.000	0.000	0.003	18.73	18.84	2.14

Test Type	Vehicle Number Test Weight (lbs)	Test Number	Date	NO _x			N ₂ O		
				Glider #2 ARB Transient 1 (g/mi)	Glider #2 ARB Transient 2 (g/mi)	Glider #2 55/65 Cruise (g/mi)	Glider #2 ARB Transient 1 (g/mi)	Glider #2 ARB Transient 2 (g/mi)	Glider #2 55/65 Cruise (g/mi)
Hot Start SC	Glider #2 60,000 lb Test	1	11/3	25.0	25.0	16.4	0.014	0.013	0.005
		2	11/6	24.9	24.8	16.9	0.012	0.014	0.004
Hot Start SC	Glider #2 80,000 lb Test	1	11/7	32.1	32.7	28.6	0.015	0.013	0.005
		2	11/8	33.0	32.7	28.6	0.017	0.016	0.007

Test Type	Vehicle Number Test Weight (lbs)	Test Number	Date	CO ₂			Fuel Economy		
				Glider #2 ARB Transient 1 (g/mi)	Glider #2 ARB Transient 2 (g/mi)	Glider #2 55/65 Cruise (g/mi)	Glider #2 ARB Transient 1 (g/mi)	Glider #2 ARB Transient 2 (g/mi)	Glider #2 55/65 Cruise (g/mi)
Hot Start SC	Glider #2 60,000 lb Test	1	11/3	2177	2117	1171	4.62	4.75	8.67
		2	11/6	2106	2105	1146	4.77	4.78	8.86
Hot Start SC	Glider #2 80,000 lb Test	1	11/7	2755	2760	1765	3.66	3.65	5.75
		2	11/8	2861	2796	1777	3.52	3.60	5.71

PM Results

The values in the table represent an average of the PM collected on three filters. The PM emission data was not collected for all tests due to power issues in the laboratory during the time of testing which affected the PM sampler. Those tests for which the PM sample system was not operating are indicated with a “N/A”.

Test Type	Vehicle Test Weight (lbs)	Test Number	Date	PM		
				ARB Transient 1 (mg/mi)	ARB Transient 2 (mg/mi)	55/65 Cruise (mg/mi)
Hot Start SC*	Glider #1 60,000 lb	1	10/5	1005	839	187
		2	10/6	1112	1127	187
		3	10/10	N/A	N/A	N/A
		4*	10/16	961	905	167
		5*	10/17	1094	1089	186
	Glider #2 60,000 lb	1	11/3	682	706	88
		2	11/6	623	648	69
Hot Start SC*	Glider #1 80,000 lb	1	10/11	N/A	N/A	N/A
		2*	10/13	1340	1288	169
		3*	10/18	N/A	N/A	N/A
	Glider #2 80,000 lb	1	11/7	652	668	83
		2	11/8	749	743	98
* Check Engine Light issue resolved prior to these tests						

Mitchell, George

From: Charmley, William
Sent: Friday, December 01, 2017 3:56 PM
To: Brewer, Tom
Cc: Cullen, Angela; Nelson, Brian; Mitchell, George
Subject: RE: TTU Follow-Up 11-28-2017
Attachments: Responses to Tenn Tech 11_28_2017 email.pdf

Dear Tom,

Attached you will find responses to all of the questions you sent earlier this week. Please let us know if you would like to schedule a call to discuss any of these topics.

My staff continues to assess the more detailed emissions data that you provided in the excel spreadsheet on November 17. We will let you know if we have any follow-up questions on that data. I have included two of my managers on this email – Angela Cullen and Brian Nelson, as well as one of the staff engineers who worked on the EPA testing, George Michell. Both Angela and George were on the November call with you. Brian is the manager for the Heavy-duty On-road and Nonroad Center.

Any of us would be happy to follow up with you or your team.

Best regards,

Bill

Bill Charmley
Director
Assessment and Standards Division
Office of Transportation and Air Quality
U.S. Environmental Protection Agency

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From: Brewer, Tom [mailto:TBrewer@tntech.edu]
Sent: Tuesday, November 28, 2017 3:40 PM
To: Charmley, William <charmley.william@epa.gov>
Subject: TTU Follow-Up 11-28-2017

Bill

The Tennessee Tech Emissions Testing Team has reviewed the EPA document ' Chassis Dynamometer Testing of Two Recent Model Heavy – Duty On – Highway Diesel Glider Vehicles ' dated November 20, 2017 and would like to ask some detailed follow up / clarification questions that might help us better understand your methods / choices and be useful in completing our Phase II and III testing.

- The tested Gliders 2016 & 2017 were 'loaned' vehicles, with 179,273 and 30,600 miles respectively. Why were these Gliders chosen to test instead of a newly refurbished / remanufactured glider engine from a rebuilder? It is our understanding of how the EPA tests OEM Heavy Duty Engines for the EPA Certification process.
- Who loaned the two Glider vehicles ?
- Our understanding is that Fitzgerald and other glider assemblers sell many options to customers, including KIT ONLY, customer supplied engines, and factory remanufactured engines from Cummins and Detroit Diesel. Can you please provide the VIN #s to allow us to determine the engine set-up ?
- Did you verify that the ECM's were set to the engine rebuilder's specifications ? ... or did you verify that the ECMs had not been modified, altered, or tampered with prior to testing ?
- Did you leak test the cylinders, verify boost, or verify the fuel maps for the test ?
- Were the gliders and the 'other recent model trucks' tested on the same day ? ... or was the comparison data pulled from existing test outcomes for the 'other trucks ' ?
- Did all four test vehicles have the exact same operating fluids (fuel / oil / coolant etc) ? If different, please provide the operating fluid information for all four vehicles.
- Why were the Glider Kits emissions compared to ' other recent model trucks' instead of the 2010 EPA Clean Air Act Emissions Standards ?
- Why is the Particulate Matter reflected in milligrams per mile instead of the standard g/bhp-hr ? ... and why are the others reflected in per mile increments ?
- What was the fuel economy on the 'other recent model trucks ' ?
- Can you provide the equivalents to Tables 12-13-14 for the 'other recent model trucks' ?
- While repairing Glider #1 and testing it 'as-is' may be representative of the real world performance, have any OEM trucks been tested in similar conditions ? If so, what were the results ?
- Given the condition of Glider #1, is it fair to say the glider vehicles were pulled off the road and tested 'as-is' ? Were the two OEM s used for comparison also pulled off the road and tested 'as-is' ?
- The test fuel used in this program met EPA Highway Certification diesel fuel specifications in 40 CFR part 1065 as stated in Table 2. Further the gliders went through a triple drain and flush procedure shown in Table 3 to ensure the engines were performing on the Test Fuel. Can you provide the fuel properties for the two comparison vehicles and the original test dates for those vehicles ?

A response this week would be greatly appreciated and thank you so much for your continued cooperation.

Thomas Brewer
Associate Vice President

Executive Director
TCIM – Tennessee Center for Intelligent Mobility



The Tennessee Tech University (TTU) Emissions Testing Team reviewed the EPA document “Chassis Dynamometer Testing of Two Recent Model Year Heavy-Duty On-Highway Diesel Glider Vehicles” dated November 20, 2017 and emailed the following questions to EPA on November 28, 2017. EPA responses to their questions are below.

TTU Question 1: The tested Gliders 2016 & 2017 were ‘loaned’ vehicles, with 179,273 and 30,600 miles respectively. Why were these Gliders chosen to test instead of a newly refurbished /remanufactured glider engine from a rebuilder? It is our understanding of how the EPA tests OEM Heavy Duty Engines for the EPA Certification process.

EPA Response:

- The purpose of the EPA glider emission testing was not to evaluate whether the remanufactured engines meet the EPA engine-based emission standards. This research was conducted primarily for EPA to update our assessment of the emissions inventory impacts for air pollutants from commercial vehicles due to the recent large increase in sales of glider vehicles, and also to estimate the emissions impact if EPA’s current standards for glider tractors are repealed. The best way to develop such emission inventory impacts is to measure the emission from in-use vehicles, not by performing the engine-based tests that would be needed to compare rebuilt glider engines to EPA’s engine-based emission standards.
- The two vehicles EPA tested represent a range of mileage, though we would have preferred to test at least one vehicle with mileage closer to the EPA regulatory useful life (435,000 miles) or beyond.
- EPA standards and regulations require a certification process which includes tests of new engines and with deteriorated parts to quantify the emissions at the end of the regulatory useful life to ensure compliance with EPA standards. EPA’s regulations require engines to meet these standards throughout their regulatory useful life. EPA’s compliance process includes both EPA testing of in-use vehicles, as well as mandatory Manufacturer-run In-use Vehicle testing of a subset of engines within their useful life to demonstrate compliance with the EPA emission standards, including the Not to Exceed (NTE) standards.

TTU Question 2: Who loaned the two Glider vehicles?

EPA Response:

- The vehicles were provided to EPA by a truck dealership for the purpose of the testing.

TTU Question 3: Our understanding is that Fitzgerald and other glider assemblers sell many options to customers, including KIT ONLY, customer supplied engines, and factory

remanufactured engines from Cummins and Detroit Diesel. Can you please provide the VIN #s to allow us to determine the engine set-up?

EPA Response:

- Both glider vehicles were equipped with engines tagged with serialized Fitzgerald placards, as well as warning placards advising to contact Fitzgerald prior to any mechanical work to be performed.
- We treat the VIN and engine serial number of borrowed vehicles used in research as Personal Identifiable Information and do not release them.

TTU Question 4: Did you verify that the ECM's were set to the engine rebuilder's specifications? ... or did you verify that the ECMs had not been modified, altered, or tampered with prior to testing?

EPA Response:

- Beyond the existence of the Malfunction Indicator Light illumination (MIL), which could indicate modification or tampering, EPA did not verify that the ECM as installed had not been modified, altered, or tampered with prior to testing. As discussed in response to Question 1, the purpose of this test program is to understand how these vehicles are emitting in the real world. We would note that, based on the EPA testing as documented in the EPA test report, these vehicles exhibited test results consistent with engines of their particular vintage, that is, highway heavy-duty diesel engines produced between model years 1998 and 2002, and the emission performance is also consistent with the emission performance in general of a 10-15 liter diesel engine which does not include modern emission-control technology such as exhaust gas recirculation, diesel particulate filter, or a SCR-based NOx reduction catalyst.

TTU Question 5: Did you leak test the cylinders, verify boost, or verify the fuel maps for the test?

EPA Response:

- EPA does not routinely do these verifications on test articles within their regulatory useful life unless there is a MIL illuminated or we have other reasons to suspect issues. Also, as discussed in response to Question 1, the purpose of this testing is to understand how these vehicles are emitting in the real world.

TTU Question 6: Were the gliders and the 'other recent model trucks' tested on the same day? ... or was the comparison data pulled from existing test outcomes for the 'other trucks'?

EPA Response:

- All of the tractors were tested in the same heavy-duty chassis dynamometer test cell as the glider vehicles according to the protocols included in Title 40 of the Code of Federal Regulations, Part 1066 to ensure the repeatability and quality of the data. This includes control of the test cell ambient conditions. Each of the vehicles were tested on different days. The comparison data for the two other tractors documented in the EPA test report come from existing test data collected by EPA using the same test cell, test equipment, and test procedures.

TTU Question 7: Did all four test vehicles have the exact same operating fluids (fuel / oil / coolant, etc.)? If different, please provide the operating fluid information for all four vehicles.

EPA Response:

- All four test vehicles were tested with the same fuel, which met the EPA highway certification diesel fuel specifications. The coolant and oil were as-received. For the International Day cab tractor, this was the factory-fill. For the other three vehicles, they were as maintained by the owner.

TTU Question 8: Why were the Glider Kits emissions compared to ‘other recent model trucks’ instead of the 2010 EPA Clean Air Act Emissions Standards?

EPA Response:

- As discussed in the response to Question 1, a principal goal of the glider tractor testing was to measure the emissions performance in an actual vehicle under representative driving cycles and to compare those to newly built engines/tractors, in order to provide EPA with the data on which we can estimate the overall real-world emissions impact of glider vehicles. We are not trying to compare the glider vehicles to EPA’s 2010 and later engine-based standards. EPA staff already were aware that glider engines derived from engines which were originally designed and built to comply with EPA’s standards in the 1998-2002 timeframe will not meet EPA’s 2010 and later standards. EPA’s standards and test procedures have changed significantly in the past 20 years. Today’s newly built engines must meet EPA standards for a regulatory useful life of 435,000 miles, while the 1998-2002 standards only applied for a regulatory useful life of 290,000 miles. EPA’s standards today require a mandatory Manufacturer-run In-use, on-the-road, testing of vehicles acquired and driven by actual users – this program did not exist and does not apply to the 1998-2002 model year engines. Today’s EPA standards include mandatory On-Board Diagnostics requirements, which did not exist and did not apply for the 1998-2002 model year engines. In addition, EPA’s emission standards for NOx and PM for current model year engines are significantly lower than the standards that applied in 1998-2002, and OEMs have nearly universally utilized significant degrees of advanced technology to achieve the 2010 and later standards, including but not limited to

electronic fuel injection systems at a level of manufacturing quality and design limits which did not exist in the 1998-2002 time frame, turbocharger technology at a level of manufacturing quality and design limits which were not utilized in the 1998-2002 time frame, cooled exhaust gas recirculation technology, diesel particulate filter technology, and SCR-based NOx catalysts.

TTU Question 9: Why is the Particulate Matter reflected in milligrams per mile instead of the standard g/bhp-hr? ... and why are the others reflected in per mile increments?

EPA Response:

- We use different metrics depending on the purpose of the testing or the comparison we are making. Three of the common metrics are discussed below.
- 1) **Work-based metrics** (like grams per brake-horsepower hour) are used for certification and compliance based on engine testing using the EPA regulatory certification cycles for the EPA engine-based emission standards. To develop an estimated comparison to the standards, we reported PM, CO, NOx, and NMHC in g/bhp-hr over the UDDS and SET Intermediate speed test cycles on pages 18-20 of the November 20 glider test report. The comparison was done with the chassis test results from the UDDS cycle because this vehicle cycle was created using the same methodologies and in-use data as was used for the Heavy-duty Engine Federal Test Procedure (FTP) cycle. For the other drive cycles included in the November 20 report, Table 11 can be used to convert g/mile results to estimated g/hp-hr.
 - 2) The test results for each drive cycle from our HD chassis test site are reported in **grams per mile** (or in the case of particulate matter, milligrams per mile). This is typical of chassis testing and is a metric that many stakeholders and researchers are familiar with. It is also representative of how emissions are emitted in the real-world.
 - 3) We also evaluate emissions in **grams per second** to develop emission rates (factors) in EPA's vehicle emissions inventory projection model – the EPA MOVES model. The MOVES model relies on data from on-road testing or chassis testing. Emission rates are developed in terms of grams per second for a given operating mode, which is dependent on vehicle speed and power.

TTU Question 10: What was the fuel economy on the 'other recent model trucks'?

EPA Response:

- CO₂ emissions are directly proportional to the road load of the vehicle. Because we did not measure the actual road load of the vehicles, we used the same target road load coefficients in the two sets of comparisons (at 60,000 and 80,000 miles). Therefore, the comparison only evaluates the performance of the powertrain and may not be

representative of the difference in CO₂ emissions that these vehicles would experience in-use. In all cases, the CO₂ emissions were lower in the glider powertrains. This is not unexpected given the known trade-off between NO_x and CO₂ emissions with respect to injection timing and similar engine calibration techniques and the relatively higher NO_x emissions for the glider vehicles.

- The CO₂ results shown in Figures 18 and 19 can be converted to mpg using the conversion factor of 10,180 grams of CO₂ per gallon of diesel fuel.

TTU Question 11: Can you provide the equivalents to Tables 12-13-14 for the ‘other recent model trucks’?

EPA Response:

- We do not have equivalent test data for the other recent model year trucks for the information presented in Tables 12-14 of the November 20 test report.
- We developed the chassis-based Supplemental Emission Test (SET) test procedure during the testing of the second glide to represent the steady-state operation of the engine-based SET cycle. This was done for two reasons. First, it provides steady-state results to complement the transient UDDS results. Second, following our conversation with TTU in early November where we learned that TTU had done testing at several steady-state operating conditions, we believe this SET testing would provide a useful comparison when considering the steady-state data gathered by Tennessee Tech.

TTU Question 12: While repairing Glider #1 and testing it ‘as-is’ may be representative of the real world performance, have any OEM trucks been tested in similar conditions? If so, what were the results?

EPA Response:

- All vehicles used in this type of in-use testing are tested “as-is” after inspection to determine whether they are in proper working order and when necessary, at a mileage less than full useful life. Glider #1 is the only vehicle that we have tested that has had a check engine light on.
- Testing a heavy-duty vehicle with a check engine light on is useful for EPA. We took advantage of the opportunity to test Glider #1 as-received and after the repair. The HD exhaust emission rates in MOVES are comprised of emission rates of normal operating vehicles plus an impact due to tampering and/or malmaintenance of the vehicle. The emission rates post-repair would be compared against the emission rates currently in MOVES representing normal operating vehicles.

TTU Question 13: Given the condition of Glider #1, is it fair to say the glider vehicles were pulled off the road and tested ‘as-is’? Were the two OEM s used for comparison also pulled off the road and tested ‘as-is’?

EPA Response:

- Yes, the glider vehicles were tested as-is after a visual inspection – please also the responses to Questions 1 and 2. This is typical of the procedures we use to develop emission factors for our MOVES emissions model, which represents emissions from a full range of in-use vehicles. We obtain a significant amount of engine data in the “new” condition at certification and manufacturers provide some in-use emissions data of well-maintained vehicles to demonstrate compliance with the EPA Not-to-Exceed emission standards. The data that is more difficult to obtain are the emissions from in-use vehicles, which is represented by the “as-is” condition.
- The Freightliner sleeper cab discussed in the November 20 glider test report was an in-use vehicle pulled in for testing after over 360,000 miles of use and was tested “as-is” after a visual inspection. The International day cab discussed in the November 20 glider test report was purchased new and was tested after approximately 10,000 miles of mileage accumulation.

TTU Question 14: The test fuel used in this program met EPA Highway Certification diesel fuel specifications in 40 CFR part 1065 as stated in Table 2. Further the gliders went through a triple drain and flush procedure shown in Table 3 to ensure the engines were performing on the Test Fuel. Can you provide the fuel properties for the two comparison vehicles and the original test dates for those vehicles?

EPA Response:

- All of the vehicles were tested using the same certification diesel fuel.
- The International day cab tractor and Freightliner sleeper cab were tested between April 28 and May 9, 2017.



January 5, 2017

VIA ELECTRONIC SUBMISSION

The Honorable Scott Pruitt
Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Ave., N.W.
Washington, DC 20460

Attn: EPA-HQ-OAR-2014-0827

RE: Comments of Environmental Defense Fund, the Environmental Law & Policy Center, and West Harlem Environmental Action (WE ACT for Environmental Justice) on the Environmental Protection Agency’s Proposed Rule, Repeal of Emission Requirements for Glider Vehicles, Glider Engines, and Glider Kits, 82 Fed. Reg. 53,442 (November 16, 2017)

The Environmental Defense Fund (“EDF”), Environmental Law & Policy Center (“ELPC”), and WE ACT for Environmental Justice (“WE ACT”) respectfully submit these comments on the Environmental Protection Agency (“EPA”)’s Proposed Rule, *Repeal of Emission Requirements for Glider Vehicles, Glider Engines, and Glider Kits*, 82 Fed. Reg. 53,442 (November 16, 2017) (“Proposed Rule”), addressing provisions contained in the agency’s 2016 final rule, *Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles—Phase 2*, 81 Fed. Reg. 73478 (October 25, 2016) (“Phase 2 Standards”).

EDF is a national nonprofit organization representing over two million members and supporters. Since 1967, EDF has linked science, economics, and law to create innovative, equitable, and cost-effective solutions to urgent environmental problems.

ELPC is the Midwest’s leading public interest environmental legal advocacy and eco-business innovation organization working to improve environmental quality and protect our natural resources. ELPC’s separate comments submitted into the docket detail how emissions from trucks will particularly affect people in the Midwest, which experiences some of the most intense freight truck traffic in the country.

WE ACT mobilizes low-income communities of color to make environmental change through advocacy, planning, and research. WE ACT's mission is to build healthy communities by ensuring that people of color and low income residents participate meaningfully in the creation of sound and fair environmental health and protection policies and practices.

EDF, ELPC, and WE ACT join the public health and environmental community, as well as major industry voices, in strongly opposing EPA's proposed repeal of these vital health safeguards. The comments below lay out the key factual issues related to the proposal and then articulate the numerous reasons why this proposed rule is unlawful. In particular, these comments demonstrate that:

- The proposed repeal would undermine overwhelmingly beneficial freight truck pollution standards, resulting in thousands of premature deaths from entirely avoidable exposure to glider vehicle pollution. New modeling detailed in these comments indicates that the Proposed Rule could lead to as many as 4,100 premature deaths in 2025 alone.
- Adopting an indefensible reading of the statute, the Proposed Rule fails to address the severe public health impacts from increased pollution from glider vehicles, the disproportionate risks to environmental justice communities, and the added burden states will face in achieving air quality standards in light of increased pollution from glider vehicles, among numerous other unexplored, pernicious implications.
- The proposal would advantage a narrow slice of the freight truck manufacturing industry by exempting them from vital safeguards—at the expense of public health in communities across the country as well as freight truck industry members that have responsibly invested in pollution controls.
- The proposal unlawfully violates both the agency's substantive duties under the Clean Air Act ("CAA" or the "Act") and minimum procedural requirements.

The comments below lay out the key factual issues related to the proposal and then articulate the numerous reasons why this proposed rule is unlawful. In particular, these comments demonstrate that:

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Errata: EDF modeling based on revised sales estimates, not revised emission factors

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I. EPA's Proposed Rule Will Have Severe Public Health Impacts.

EPA's proposal to roll back the glider provisions of the Phase 2 Standards fails to consider the public health impacts of these highly polluting vehicles. Without common sense provisions ensuring that glider trucks achieve the same pollution standards that all other new freight trucks must achieve, these vehicles can use the "oldest, dirtiest, and deadliest" engines.¹ The Proposed Rule fails to mention, let alone consider, the substantial volume of criteria pollutant emissions from unregulated glider vehicles, and fails to consider the severe impacts to public health, including thousands of premature deaths, which would result were the proposal adopted. Indeed, the proposal was published before EPA could finish its own updated emissions testing that now further confirms the pollution burden posed by these vehicles.²

a. The Proposed Rule allows for an unlimited increase in high-polluting, uncontrolled glider vehicles.

Glider vehicles are diesel freight trucks manufactured by adding a donor engine and powertrain to a new truck chassis. A glider kit is the chassis, front axle, and body of the truck, before the engine and drivetrain are installed. EPA's 2016 Phase 2 Standards required that glider vehicles meet the same pollution standards as all other new diesel freight trucks,³ in order to address the growing practice of using essentially uncontrolled, high-polluting pre-2002 model year engines as the donor engines in these vehicles.⁴

The practice of building a glider vehicle originated as a means of salvaging useful engines from otherwise wrecked vehicles. Before 2010, a few hundred of these glider vehicles were produced nationwide every year, commensurate with this traditional salvage type of use.⁵ That same year, 2010, marked the advent of more protective EPA standards for heavy-duty diesel engines requiring emissions reductions of criteria pollutants, notably oxides of nitrogen (NOx) and particulate matter (PM_{2.5}), by 90% over earlier model year engines.⁶ These standards reflect the improved performance of emissions control technology – including exhaust aftertreatment devices such as selective catalytic reduction and particle traps.⁷ As EPA noted at the time, these new pollution reduction technologies "allow[ed] a major advancement in diesel emissions

¹ Statement by the Hon. Jamie Raskin (D. Md.), EPA public hearing on Proposed Rule (Dec. 4, 2017) <https://raskin.house.gov/media/press-releases/rep-raskin-s-remarks-epa-public-hearing>.

² As noted in Section VII below, EPA's failure to consider the public health and environmental impacts of the proposal render the proposal both substantively and procedurally unlawful.

³ With certain tailored provisions and flexibilities, as discussed in greater detail in Section XI.

⁴ See generally Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles—Phase 2; Final Rule, 81 Fed. Reg. 73,478, 73,517 (October 25, 2016) [Hereinafter "HDP2 Rule" or "Phase 2 Standards"].

⁵ See *id.*, at 73,941-43; 73,942 (Oct. 25, 2016).

⁶ Control of Air Pollution From New Motor Vehicles: Heavy-Duty Engine and Vehicle Standards and Highway Diesel Fuel Sulfur Control Requirements; Final Rule, 66 Fed. Reg. 5001, 5002 (Jan. 18, 2001) ("This program will reduce particulate matter and oxides of nitrogen emissions from heavy duty engines by 90 percent and 95 percent below current standard levels, respectively.")

⁷ See 66 Fed. Reg. at 5009, 5036 (Jan. 18, 2001).

control of a magnitude comparable to that ushered in by the automotive catalytic converter in the 1970's.”⁸

Glider vehicle production increased significantly beginning in 2010, with glider vehicles typically using engines manufactured in 2002 and earlier,⁹ taking advantage of a loophole that determined applicable emission standards based on the year the *engine* was manufactured rather than the vehicle, allowing new glider vehicles to be sold that failed to meet the current health-protective standards.

Glider vehicle production soared from a few hundred a year prior to 2010 to an estimated over 10,000 in 2016.¹⁰ Current glider vehicle production rates appear to be even greater.¹¹ Glider vehicles sold with engines manufactured prior to EPA’s more protective emission standards are dramatically more polluting than new trucks with modern engines, with significantly higher emissions of diesel particulate matter, PM_{2.5}, and ozone-forming NOx.

EPA addressed this loophole in the 2016 Phase 2 Standards by making freight truck pollution standards equally applicable to all freight trucks, based on the year the new freight truck is manufactured, regardless of the engine year.¹² EPA now proposes to repeal these provisions.

b. Untreated emissions from diesel engines seriously harm public health and the environment.

The exhaust emitted from diesel engines is among the most dangerous and pervasive sources of air pollution. It is a complex mixture of both gaseous and solid materials. The solid material is known as diesel particulate matter, most of which is fine particles or PM_{2.5}, and leads to a host of respiratory problems and thousands of premature deaths every year. Diesel particulate matter is typically comprised of carbon particles (soot) and cancer-causing toxic chemicals. Diesel exhaust also contains gaseous pollutants including smog-forming oxides of nitrogen as well as sulfur dioxide, which forms harmful fine particles and falls back to earth as acid rain.

- a.** Diesel exhaust is classified as a probable and known human carcinogen, like asbestos, benzene, and cigarette smoke. The National Institute for Occupational Safety and Health, International Agency for Research on Cancer, Health Effects Institute, U.S. Department of Health and Human Services National Toxicology Program, and the U.S. Environmental Protection Agency have all determined that diesel exhaust is a probable or likely human carcinogen.¹³ The California EPA

⁸ *Id.* at 5009.

⁹ HDP2 Rule, 81 Fed. Reg. at 73,518 n.93.

¹⁰ *Id.* at 73,943.73943

¹¹ Testimony by Nuss Motors, EPA public hearing on glider proposal (December 4, 2017). See detailed discussion in Section I(i) below.

¹² HDP2 Rule, 81 Fed. Reg. at 73,941-47. With certain tailored provisions and flexibilities, as discussed in greater detail in Section XI.

¹³ U.S. Environmental Protection Agency. 2002. Health Assessment Document For Diesel Engine Exhaust. May 2002. National Center for Environmental Assessment - Office of Research and Development. Washington, DC. EPA/600/8-90/057F ([citing sources](#)).

and the World Health Organization classify diesel exhaust as a known human carcinogen.¹⁴

- b.** In addition to these assessments of the carcinogenic nature of diesel exhaust as a mixture of pollutants, many of the individual components of diesel exhaust have also been linked to cancer: for example, diesel constituents benzene and 1,3-butadiene are well-characterized human carcinogens, associated with increased risk of leukemia and lymphoma.¹⁵ The American Cancer Society cohort study has identified an association between exposure to fine particles, sulfates and lung cancer.¹⁶ Several chemicals present in diesel exhaust are known or suspected to increase breast cancer risk, particularly polycyclic aromatic hydrocarbons (PAHs).¹⁷
- c.** Diesel air pollution adds to cancer risk all around the country. In many counties across the country, diesel emissions are the air toxic with the highest contribution to cancer risk. For example, a 2003 assessment in the Seattle area found that diesel soot (a component of diesel particulate matter, or PM) accounts for somewhere between 70-85 percent of the total cancer risk from all air toxics.¹⁸ And in the South Coast Air Basin, which includes Los Angeles, diesel exhaust has accounted for about 84 percent of the cancer risk from air toxics, according to a 2008 study.¹⁹ In 2011, New Jersey ranked diesel exhaust particulate matter as having the greatest relative cancer risk statewide among air toxics.²⁰ In California's San Joaquin Valley alone, one report estimated that diesel pollution caused more than 250 premature deaths in 2004.²¹
- d.** Because diesel air pollution is a complex mixture of chemicals, exposure to diesel air pollution is considered to contribute to a wide range of non-cancer health effects, including adverse pulmonary effects,²² pulmonary disease, cardiovascular

¹⁴ World Health Organization, Public health round-up, 90 Bulletin of the World Health Organization 477-556. (July 2012), <http://www.who.int/bulletin/volumes/90/7/12-010712/en/>; International Agency for Research on Cancer, IARC: Diesel Engine Exhaust Carcinogenic (Jun. 12, 2012), available at https://www.iarc.fr/en/media-centre/pr/2012/pdfs/pr213_E.pdf; CARB, Overview: Diesel Exhaust and Health (last reviewed Apr. 12, 2016), <https://www.arb.ca.gov/research/diesel/diesel-health.htm>.

¹⁵ Melnick RL, Huff JE. 1993. 1,3-Butadiene induces cancer in experimental animals at all concentrations from 6.25 to 8000 parts per million. IARC Sci. Publ. 309-322; National Toxicology Program (NTP). 1993. NTP Toxicology and Carcinogenesis Studies of 1,3-Butadiene (CAS No. 106-99-0) in B6C3F1 Mice (Inhalation Studies). 434:1-389; Snyder R. 2002. Benzene and leukemia. Crit. Rev. Toxicol. 32:155-210; Smith MT, Jones RM, Smith AH. 2007. Benzene exposure and risk of non-Hodgkin lymphoma. Cancer Epidem. Biomark. Prev. 16:385-391.

¹⁶ Pope CA 3rd, Burnett RT, Thun MJ, Calle EE, Krewski D, Ito K, Thurston GD. 2002. Lung cancer, cardiopulmonary mortality, and long-term exposure to fine particulate air pollution. JAMA. 287(9):1132-41.

¹⁷ Brody JG, Moysich KB, Humblet O, Attfield KR, Beehler GP, Rudel RA. 2007. Environmental pollutants and breast cancer: epidemiologic studies. Cancer. 109:2667-2771.

¹⁸ Puget Sound Clean Air Agency, Final Report: Puget Sound Air Toxics Evaluation (Oct. 2003) at ES-4, <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.398.5739&rep=rep1&type=pdf>.

¹⁹ South Coast Air Quality Management District, Final Report: MATES III (Sep. 2008) at ES-3, <http://www.aqmd.gov/home/library/air-quality-data-studies/health-studies/mates-iii/mates-iii-final-report>.

²⁰ New Jersey Department of Environmental Protection, Air Toxics in New Jersey: Diesel Emissions (2011), <http://www.nj.gov/dep/airtoxics/diesemis.htm>.

²¹ Anair, D. and P. Monahan. 2004. Sick of Soot: Reducing the Health Impacts of Diesel Pollution in California. Cambridge, MA: Union of Concerned Scientists. June.

²² Peden DB. 2002. Pollutants and asthma: role of air toxics. Environ. Health Perspect. 110:565-568.

effects, neurotoxicity, low birth weight in infants, premature births, congenital abnormalities, and elevated infant mortality rates.²³

- e. Diesel air pollution is a major source of harmful fine particles, also known as PM_{2.5}, both from direct emission as well as through PM formed in the atmosphere from gaseous diesel emissions. Particulate matter, or soot, can aggravate respiratory conditions such as asthma and chronic bronchitis and has been associated with cardiac arrhythmias (heartbeat irregularities), heart attacks and premature mortality. People with heart or lung disease, the elderly, and children are at highest risk from exposure to particulate pollution.²⁴ Current ambient concentrations of particulate matter are a health risk in many locations throughout the country. As with other diesel engines, heavy-duty vehicles emit substantial quantities of PM_{2.5}, which contribute to these significant health risks.
- f. Diesel air pollution contributes to harmful smog levels. Diesel air pollution components—particularly oxides of nitrogen, or NO_x—are major precursors to ozone formation, commonly known as smog.²⁵ The mobile source sector as a whole is responsible for more than half of all NO_x emissions in the U.S.²⁶
- g. High ozone levels cause acute respiratory problems, aggravated asthma, decreased lung function, inflammation of lung tissue, an increase in hospital admissions and emergency room visits for respiratory causes. Children with asthma are most at risk. Ozone is also associated with premature death.²⁷
- h. Diesel air pollution impairs visibility.²⁸ The same fine particles that have adverse health effects cause the haze that pollutes scenic vistas in our National Parks, which more than 330 million people visited in 2016.²⁹
- i. Diesel air pollution threatens ecosystems across the country. The constituents of diesel exhaust contribute to the acid rain that continues to harm sensitive

Delfino RJ. 2002. Epidemiologic evidence for asthma and exposure to air toxics: linkages between occupational, indoor, and community air pollution research. 110:573-589.

²³ Krivoshto IN, Richards JR, Albertson TE, Derlet RW. 2008. The Toxicity of Diesel Exhaust: Implications for Primary Care. J Am Board Fam Med. 21:55– 62.

²⁴ American Lung Association, Particle Pollution, <http://www.lung.org/our-initiatives/healthy-air/outdoor/air-pollution/particle-pollution.html> (last accessed Jan. 4, 2018).

<http://www.lungusa.org/site/pp.asp?c=dvLUK9O0E&b=35356>

²⁵ U.S. Environmental Protection Agency, Air Emission Sources, Jun. 2, 2017, <https://www.epa.gov/air-emissions-inventories/air-emissions-sources> (accessed Dec. 30, 2017)..

²⁶ U.S. Environmental Protection Agency, Air Emission Sources: National Summary of Nitrogen Oxides Emissions, Feb. 10, 2017, https://www3.epa.gov/cgi-bin/broker?polchoice=NOX&_debug=0&_service=data&_program=dataprog.national_1.sas (accessed Dec. 30, 2017)..

²⁷ Bell ML, Peng RD, Dominici F. 2006. The exposure-response curve for ozone and risk of mortality and the adequacy of current ozone regulations. Environ Health Perspect. 114(4):532-536.

Bell ML, McDermott A, Zeger SL, Samet JM, Dominici F. 2004. Ozone and short-term mortality in 95 US urban communities, 1987-2000. JAMA. 292(19):2372-2378.

Levy JI, Chemerynski SM, Sarnat JA. 2005. Ozone exposure and mortality: an empiric bayes metaregression analysis,” Epidemiol. 16(4):458-468.

²⁸ See, e.g., Hyslop, Nicole Pauly. 2009. Impaired visibility: the air pollution people see. Atmospheric Environment 43:182-195.

²⁹ National Park Service, Frequently Asked Questions, <https://www.nps.gov/aboutus/faqs.htm> (last accessed Jan. 4, 2018).

ecosystems, including those in the Adirondack Mountains, southern Appalachians and high elevation ecosystems in the western United States.³⁰

- c. *In its 2016 Final Rule, EPA found that glider vehicles emit extremely high amounts of NOx, PM_{2.5}, and diesel particulate matter, putting public health at risk.***

Multiple presidential administrations have repeatedly updated and advanced heavy duty truck emission standards, a reflection of the urgent need for these standards and overwhelming evidence of their significant public health benefits.³¹ Today's new heavy-duty trucks are at least 90 percent cleaner than those manufactured just a decade ago thanks to more protective emissions standards adopted by EPA in 2000 and phased in from 2007 to 2010.³² These improvements have had dramatic benefits for air quality. According to experts from the International Council on Clean Transportation:

In just the past 10 years, EPA's actions have led to a greater than 50% drop in PM_{2.5} and NO_x emissions from the country's on-road vehicle fleet. Put that a different way: about a third of the total PM_{2.5} reduction across all pollution sources since 2007, and more than half of the total NO_x reduction, have come from cleaning up heavy truck exhaust. As a result, air quality in the US has improved substantially: average concentrations of PM_{2.5} and ozone have dropped by 35% and 13% over that same time frame.³³

This progress is at risk from the pollution emitted by glider vehicles, as EPA found in its 2016 Phase 2 Standards, and which new evidence further underscores.

The old engines installed in typical glider vehicles lack basic emission controls. For example, Fitzgerald Glider Kits, one of the largest manufacturers of glider vehicles in the country,³⁴ predominantly uses engines that were manufactured before 2002,³⁵ and thus lack both exhaust gas recirculation (EGR) and exhaust aftertreatment. EPA included this factual finding in its 2016

³⁰ EPA, About Diesel Fuels, <https://www.epa.gov/diesel-fuel-standards/about-diesel-fuels> (last accessed Jan. 4, 2018).

³¹ See, e.g., Control of Emissions of Hazardous Air Pollutants from Mobile Sources, 65 Fed. Reg. 48,057 (Aug. 4, 2000); Control of Emissions of Hazardous Air Pollutants From Mobile Sources, 66 Fed. Reg. 5001 (Jan. 18, 2001); Control of Hazardous Air Pollutants From Mobile Sources, 72 Fed. Reg. 8427 (Feb. 26, 2007); HDP2 Rule, 81 Fed. Reg. 73,478 (Oct. 25, 2016).

³² Control of Air Pollution From New Motor Vehicles: Heavy-Duty Engine and Vehicle Standards and Highway Diesel Fuel Sulfur Control Requirements; Final Rule, 66 Fed. Reg. 5001, 5002 (Jan. 18, 2001); see also HDP2 Rule, 81 Fed. Reg. at 73,942 (Oct. 25, 2016).

³³ Rachel Muncrief and Josh Miller, Scott Pruitt's EPA wants to resurrect the dirty diesel, ICCT Blog (Dec. 1, 2017), <https://www.theicct.org/blog/staff/glider-proposal-means-resurrecting-dirty-diesel>.

³⁴ Fitzgerald Glider Kits, *About Fitzgerald*, <https://www.fitzgeraldgliderkits.com/about-fitzgerald> (last accessed Dec. 29, 2017); Tom Berg, *The Return of the Glider*, TruckingInfo, Apr. 2013, <http://www.truckinginfo.com/channel/equipment/article/story/2013/04/the-return-of-the-glider.aspx>.

³⁵ See, e.g. Tom Berg, *The Return of the Glider*, TruckingInfo.com, Apr. 2013, <http://www.truckinginfo.com/article/story/2013/04/the-return-of-the-glider.aspx> (describing the engines used by Fitzgerald as Detroit's 12.7-liter Series 60 from the 1999 to 2002 era, as well as "pre-EGR 14-liter Cummins and 15-liter Caterpillar diesels.").

Final Rule;³⁶ more recently, it similarly concluded in a November 2017 memo in the record that “[n]early all engines for recent glider production are 1998-2002 pre-EGR engines.”³⁷

As a result, EPA estimated in the 2016 Phase 2 Standards that glider vehicles can have NOx and PM emissions 20–40 times higher than current engines.³⁸ EPA also estimated in the 2016 Phase 2 Standards that if left unregulated, by 2025, glider vehicles would emit nearly 300,000 tons of NOx and nearly 8,000 tons of PM annually.³⁹ Assuming 10,000 uncontrolled glider vehicles are sold annually between 2017 and 2025, glider vehicles would comprise only 5% of the heavy trucks on the road but would account for one third of all NOx and PM emissions from the heavy truck fleet.⁴⁰

The additional pollution that EPA’s proposed rescission of glider protections would enable is substantial. For comparison, based on EPA’s 2016 estimates, the amount of NOx pollution emitted over the life of just one year of sales of glider vehicles is ten times greater than all of the NOx emitted by all the “defeat device” Volkswagen vehicles in the U.S. combined.⁴¹ One of the most significant recent programs to address NOx emissions, the Cross State Air Pollution Rule Update, is expected to reduce 75,000 tons of NOx every year; EPA estimated that without glider vehicle pollution standards, glider NOx emissions in 2025 would be four times that amount.⁴² These massive quantities of NOx emissions translate to more frequent and more serious smog incidences around the country—aggravating asthma and other serious respiratory conditions.

Table XX shows EPA’s 2016 estimate of the annual volume of glider vehicle emissions in comparison to other major regulations and events.

³⁶ HDP2 Rule, at 942-43.

³⁷ Redacted Letter from Charles Moulis to William Charmley, Nov. 15, 2017, EPA-HQ-OAR-2014-0827-2379, available at <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-2379>.

³⁸ HDP2 Rule, 81 Fed. Reg. at 73,943.

³⁹ HDP2 Rule, 81 Fed. Reg. at 73,943; see also HDP2 Response to Comments Section 14 Appendix A.

⁴⁰ HDP2 Rule, 81 Fed. Reg. at 73,943; see also HDP2 Response to Comments Section 14 Appendix A.

⁴¹ Compare HDP2 Response to Comments at 1964,

<https://nepis.epa.gov/Exe/ZyPDF.cgi/P100P8IS.PDF?Dockey=P100P8IS.PDF> (1,000 MY 2017 glider vehicles would emit 41,500 more tons of NOx over their lifetime compared to vehicles with new engines) with Guillaume P Chossière et al. 2017. Public health impacts of excess NOx emissions from Volkswagen diesel passenger vehicles in Germany. Environ. Res. Lett. 12 034014 (estimating 36.7 million kg in excess NOx emissions from Volkswagen vehicles in the U.S. between 2008 and 2015, converted to 41,000 tons of NOx).

⁴² Cross-State Air Pollution Rule Update for the 2008 Ozone NAAQS, 81 Fed. Reg. 74,504, 74,573, (Oct. 26, 2016), available at <https://www.gpo.gov/fdsys/pkg/FR-2016-10-26/pdf/2016-22240.pdf>; HDP2 Rule, 81 Fed. Reg. at 73,943.

Table XX. Comparison of Annual NO_x Emissions

	NO_x EMISSIONS REDUCTIONS [TPY]
FLEETWIDE GLIDER VEHICLE EMISSIONS ABOVE CONTROL LEVELS	190,231 TONS IN 2025 ¹
	318,615 TONS IN 2040 ¹
EPA CROSS-STATE AIR POLLUTION RULE UPDATE	75,000 IN 2017 (ANNUAL) ²
	61,000 IN 2017 (OZONE SEASON) ²
EPA TIER 3 MOTOR VEHICLE EMISSION AND FUEL STANDARDS	264,369 TONS IN 2018 ³
	328,509 TONS IN 2030 ³
VW NO_x EXCESS	11,200 TONS IN 2015 ⁴

TABLE NOTES:

¹ EPA Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles - Phase 2 Response to Comments for Joint Rulemaking, Aug 2016, Appendix A, p. 1962

² EPA Regulatory Impact Analysis of the Cross-State Air Pollution Rule (CSAPR) Update for the 2008 National Ambient Air Quality Standards for Ground-Level Ozone, September 2016, p. ES-8

³ EPA Control of Air Pollution from Motor Vehicles: Tier 3 Motor Vehicle Emission and Fuel Standards Final Rule RIA, EPA-420-R-14-005, March 2014, p. ES-7

⁴ S.R.H. Barrett et al., *Envtl. Res. Lett.* 10 (2015) doi:10.1088/1748-9326/10/11/114005^[SEP]

Based on its 2016 estimates, EPA performed a risk analysis that found that each model year of glider vehicle sales would be associated with up to 1,600 premature mortalities over the lifetime of the vehicles.⁴³ EPA recognized that the assessment was conservative because it considered only the health impacts of fine particulate emissions — not the carcinogenic diesel particulate — and does not consider health effects of ozone formation attributable to these vehicles' high NO_x

⁴³ HDP2 Response to Comments Section 14 Appendix A.

emissions. It also assumes production of 10,000 glider vehicles per year but states that this number is probably low, based on public comments to EPA.⁴⁴

d. EPA's latest testing demonstrates that glider vehicle emissions are even greater than previously estimated.

EPA recently undertook more emission testing at EPA's National Vehicle Fuel and Emissions Laboratory (NVFEL) to refine its data on glider emissions. EPA's newly released updated testing data, which the Proposed Rule fails to acknowledge, indicate that the threat to human health posed by glider trucks is even more serious than EPA found in its 2016 Final Rule.⁴⁵

The test program was comprehensively documented in a November 20, 2017, 40-page test report that included detailed information and data on the test vehicles, test cycles, emission measurement procedures, test fuels, test conditions, quality control and assurance measures, and emission test results.⁴⁶ The results of EPA's full chassis dynamometer testing of two glider vehicles and two compliant tractors manufactured in 2014 and 2015 showed that NOx emissions from the glider vehicles were as much as 43 times higher than the compliant vehicles. Particulate emissions ranged as much as 450 times higher than modern, compliant freight trucks.⁴⁷ In fact, while testing glider trucks for particulate emissions, EPA had to adjust the flow of exhaust through their system because the levels were so high that the sensor could not effectively measure them.⁴⁸



Figure 9: PM Filters from Glider #1 testing over the Super Cycle Test²

Source: EPA. One visible indication of the pollution burden associated with glider vehicles: the PM filters used to measure emissions from one of the glider vehicles that EPA tested show filters

⁴⁴ HDP2 Response to Comments at 1877. Glider truck annual sales figures are discussed in greater detail in Section 1(i) below.

⁴⁵ U.S. Environmental Protection Agency, Chassis Dynamometer Testing of Two Recent Model Year Heavy-Duty On-Highway Diesel Glider Vehicles, Nov. 20, 2017, Docket No. EPA-HQ-OAR-2014-0827-2417, <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-2417>.

⁴⁶ *Id.*

⁴⁷ *Id.* at 3.

⁴⁸ *Id.* at 14-15, Figure 9.

*blackened from PM. According to EPA's report, "[t]he PM sampling equipment shut down at phase 2" because the filters were "overloaded with PM" so filters A3 and A4 were not used.*⁴⁹

The testing applied a variety of testing cycles in order to mirror actual use patterns for these vehicles. These are the same test cycles used for certification testing. While the level of disparity between emissions from glider vehicles versus from recent model year freight trucks varied based on the pollutant and test cycle, EPA found that "criteria pollutant emissions (NO_x, PM, HC, CO) from the ... glider vehicles were consistently higher than those of the conventionally manufactured 2014 and 2015 tractors."⁵⁰

The International Council on Clean Transportation (ICCT) evaluated the health implications from these updated pollution figures. ICCT found that if the sales of glider trucks continue to grow, even at a moderate level,⁵¹ they would emit an additional 1.5 million tons of NO_x and 16,000 tons of PM emissions, equivalent to more than \$12 billion in health damages over the next decade.⁵² Estimated premature mortalities and other health effects would thus be correspondingly higher.

These findings underscore that thousands of Americans will die prematurely due to entirely avoidable exposure to glider vehicle emissions should this damaging Proposed Rule be finalized.

⁴⁹ *Id.* at 14, 15, Figure 9.

⁵⁰ *Id.* at 3.

⁵¹ As discussed in greater detail in Section 1(i), record evidence indicates the strong likelihood that glider sales could indeed continue to grow.

⁵² Rachel Muncrief and Josh Miller, Scott Pruitt's EPA wants to resurrect the dirty diesel, ICCT Blog, Dec. 1, 2017, <https://www.theicct.org/blog/staff/glider-proposal-means-resurrecting-dirty-diesel> (accessed Dec. 30, 2017).

Per-mile emissions of glider vehicles versus 2010 compliant vehicles

PM_{2.5} (milligrams per mile)



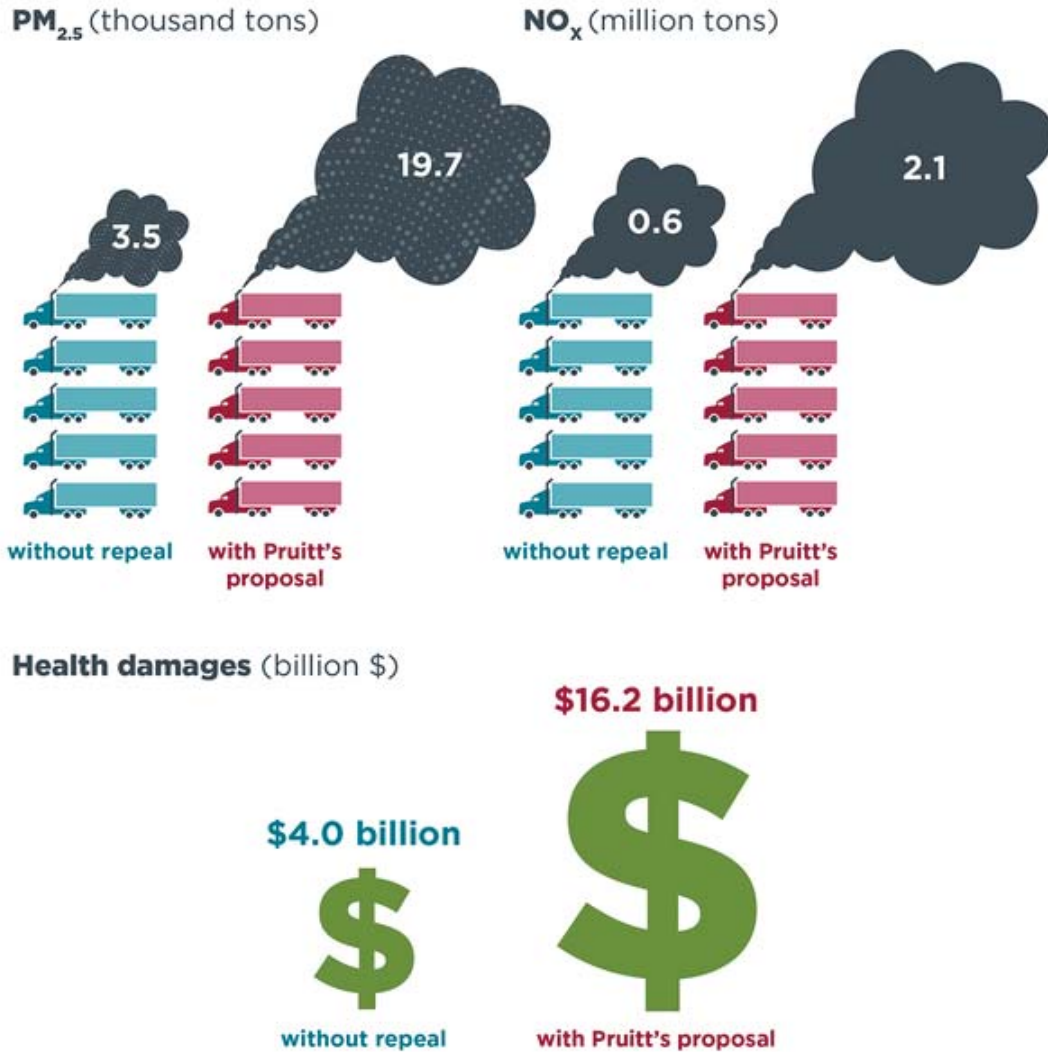
NO_x (grams per mile)



Source: ICCT⁵³

⁵³ *Id.* (Note: “Per-mile emissions of glider vehicles versus 2010 compliant vehicles. Results are derived from chassis dynamometer testing conducted by US EPA’s National Vehicle & Fuel Emissions Laboratory (November 20, 2017). Results reflect a 95% weighting of highway activity (55 and 65 mph cycles) and 5% weighting of transient activity (ARB transient) for a test vehicle with a combined weight of 60,000 pounds (including the tractor, trailer, and payload.)”; U.S. Environmental Protection Agency, Chassis Dynamometer Testing of Two Recent Model Year Heavy-Duty On-Highway Diesel Glider Vehicles, Nov. 20, 2017, Docket No. EPA-HQ-OAR-2014-0827-2417, <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-2417>).

Cumulative emissions and health damages of Class 7 and 8 tractor truck sales over the next decade (2018-2027)



Source: ICCT.⁵⁴

⁵⁴ *Id.* (Note: “Cumulative emissions and health damages of Class 7 and 8 tractor truck sales over the next decade (2018-2027). Estimates without repeal assume glider vehicle sales without 2010 emissions compliant engines drop to 1,000 units per year from 2018 to 2020 and to zero starting in 2021. Estimates with Pruitt’s proposal assume sales of glider vehicles with pre-2002 engines are permitted to grow from approximately 10,000 units per year in 2015 to 17,400 units per year in 2027 (10.4% of total sales). Annual total sales and vehicle-miles traveled by tractor-trailers are sourced from US EPA’s Motor Vehicle Emission Simulator ([MOVES2014](#)). Monetized health damages (in billion 2017 \$) are equal to ICCT estimates of direct PM_{2.5} and NO_x emissions from Class 7 and 8 tractor trucks sold in 2018 and later, multiplied by US EPA estimates of damages per ton of direct emissions from on-road mobile sources in 2016. Damages in future years are converted to present value terms using a discount rate of 5% per year.”).

e. EPA issued its proposal before its new testing was even complete.

EPA issued the Proposed Rule on November 16, 2017, before the agency published its own testing on November 20, 2017.⁵⁵ The Proposed Rule does not refer to, rely on, or explain the agency's own latest findings with respect to glider vehicle emissions.

The Proposed Rule arbitrarily and unlawfully moves towards repealing these common sense protections without meaningfully considering the potential emissions impact. Instead of considering EPA's latest testing, which underscores the serious pollution impacts from this proposal, or engaging with EPA's considered conclusions in the 2016 Phase 2 Standards, the Proposed Rule's only mentions of emission impacts or pollution levels are references to an unsupported and flawed letter from Tennessee Technological University ("Tennessee Tech" or "TTU"), discussed in further detail in Section 1(f) below.

These aspects of the proposal demonstrate EPA has failed to consider properly supported technical data, science and expertise that show these actions put the health of American families at risk. This and numerous other omissions render the proposal arbitrary, capricious and unlawful, as discussed further in Section VII.

f. The TTU study that EPA invokes is unsupported and flawed.

Tennessee Tech conducted a research project from September 2016 to November 2016 to assess "the environmental and economic impact" of EPA's emission requirements for glider vehicles, glider engines, and glider kits.⁵⁶ The project and its results were summarized in a June 15, 2017, letter from TTU to U. S. Congressman Diane Black of Tennessee.⁵⁷ The letter was authored by Philip B. Oldham and Thomas Brewer, President and Associate Vice President of TTU, respectively. In turn, this study was cited in a July 10, 2017 petition from several glider vehicle manufacturers as a basis for requesting EPA to reconsider its recently finalized rules affecting glider vehicles and their engines.⁵⁸

In its proposal to repeal the emission requirements for glider vehicles, glider engines, and glider kits, EPA explicitly discussed the TTU study and summarized the study's conclusions verbatim without presenting its own independent assessment and critique of the study.⁵⁹ The agency's Proposed Rule fails to mention an EPA memo to the docket that summarizes a telephone meeting that EPA staff members had with TTU representatives to discuss testing methodologies, facilities, and test equipment used to generate the data summarized in the July 10, 2017

⁵⁵ U.S. Environmental Protection Agency, Chassis Dynamometer Testing of Two Recent Model Year Heavy-Duty On-Highway Diesel Glider Vehicles, Nov. 20, 2017 at 3, Docket No. EPA-HQ-OAR-2014-0827-2417.

⁵⁶ July 10, 2017 Petition for Reconsideration of Application of the Final Rule Entitled "Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles—Phase 2 Final Rule" to Gliders, from Fitzgerald Glider Kits, LLC; Harrison Truck Centers, Inc.; and Indiana Phoenix, Inc. (July 10, 2017), EPA-HQ-OAR-2014-0827, Exhibit 1, available at <https://www.epa.gov/sites/production/files/2017-07/documents/hd-ghg-fr-fitzgerald-recons-petition-2017-07-10.pdf> (hereinafter "Reconsideration Petition").

⁵⁷ Reconsideration Petition, Exhibit 1.

⁵⁸ Reconsideration Petition.

⁵⁹ 82 Fed. Reg. 53,444.

petition⁶⁰--even though this memo raises serious concerns about how the study was conducted that bear directly on the rigor and credibility of the study's conclusions. Furthermore, EPA indicated in this memo to the docket that the agency had requested additional information via email from TTU as a follow-up to the meeting.⁶¹ No mention of this request is included in the Proposed Rule nor is there any documentation of TTU's response to this request, if any, in the docket. Similarly, an email from EPA Office of Transportation and Air Quality Director William Charmley to TTU Associate Vice President Tom Brewer dated December 1, 2017 was posted to the regulatory docket on December 29, 2017.⁶² The email indicates that EPA possesses "more detailed emissions data that [TTU] provided in the excel spreadsheet on November 17." This information is neither referenced in the Proposed Rule nor available in the docket.

In contrast, the Agency arbitrarily ignored its own testing of two glider vehicles, discussed in detail above. The EPA test program represents the most comprehensive and rigorous assessment of the emission impacts of glider vehicles performed to date and available in the record. It was conducted on modern equipment, using certification test protocols and appropriate test cycles, with documented test conditions, results, and all other relevant information. Not only does this study confirm and expand EPA's analysis of the harmful glider vehicle emission impacts included in the heavy-duty Phase 2 Standards -- indicating that emission levels of diesel particulate may be even higher than EPA initially estimated in the 2016 Final Rule -- it also directly contradicts the results of the TTU study.⁶³

The TTU study and its conclusions raise a number of serious concerns, such that any reliance on this study would constitute legal error.⁶⁴ First, the TTU study documentation that is available to the public fails to provide sufficient detail to determine the veracity of its conclusions. Second, the results do not support the conclusions presented in the glider manufacturers' petition for reconsideration or in EPA's Proposed Rule. Finally, a comparison with the Agency's own studies contradicts TTU's findings, further undermining its credibility. We discuss these concerns in more detail below.

⁶⁰ Memorandum, EPA Teleconference with Tennessee Tech University Regarding Glider Test Report Summarized in June 2017 Letter; Tennessee Tech University – Summary of Heavy Duty Truck Study and Evaluation of the Phase II Heavy Duty Truck Rule, Nov. 13, 2007, Docket No. EPA-HQ-OAR-2014-0827-2416, available at <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-2416> (hereinafter "EPA TTU Memo").

⁶¹ *Id.* at 4. On November 29, 2017, EDF submitted a Freedom of Information Act request to EPA for records related to the TTU testing data and other emissions testing of glider vehicles, EPA-HQ-2018-002121. Our request for expedited processing was denied. On December 15, 2017, EDF appealed the denial. We have not yet received a determination on our appeal. EPA has not yet produced any records responsive to the request. EDF has also partnered with the Southern Environmental Law Center ("SELC") to seek relevant testing data from TTU. SELC submitted a public records request pursuant to the Tennessee Public Records Act, Tenn. Code Ann. § 10-7-503, on December 4, 2017. TTU denied the request on the grounds that disclosure of the requested records was prohibited under a state law that provides that sponsored research shall not be open for public inspection unless released by the sponsor, Tenn. Code Ann. § 49-7-120(b)(5).

⁶² Email from William Charmley to Tom Brewer, Doc. ID: EPA-HQ-OAR-2014-0827-4272, available at <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-4272>.

⁶³ Phase 2 Standards, Appendix A to Section 14 of the Response to Comments for Joint Rulemaking, Pgs 1960-1968

⁶⁴ See *Sierra Club v. U.S. Army Corps of Engineers*, F.2d 1011 (2d Cir. 1983) (invalidating an EIS for "bad faith" reliance on faulty data).

- i. The TTU study fails to follow well established EPA emission measurement and testing protocols.

TTU claimed in a 4-page summary test report that it tested “thirteen heavy-duty trucks on a common chassis dynamometer at a common site; eight trucks were remanufactured engines and five were OEM ‘certified’ engines, all with low mileage.” This short statement represents all that is said by TTU to describe its testing. The report presents (1) no details on the specifics of the test vehicles (e.g., model year, mileage, and condition), (2) no information on test cycles, test conditions, test loads, and test fuels, (3) no information on the testing facilities (e.g., test equipment, calibration and maintenance practices, and quality assurance procedures), (4) no information on emission test protocols, and (5) no meaningful data on the pollutants of interest, such as NO_x and PM.

The TTU test summary does not conform to standard engineering and scientific operating practices in reporting results from vehicle and engine emission testing. Any use of the report’s conclusions based on the deficient and incomplete information that is publicly available would be arbitrary and capricious. Yet the Proposed Rule cites and includes its conclusions.

The only numeric data presented by TTU are carbon monoxide levels for the 13 trucks it tested.⁶⁵ The test data show that the test vehicles in all cases have CO levels substantially below the standard for that pollutant. This result is what would have been expected since diesel engines have inherently low CO emission levels. Notably, these results—the only real data described by TTU from the study—are irrelevant to claims that TTU made with regards to NO_x and PM emissions.⁶⁶ Nonetheless these claims were subsequently quoted in the glider manufacturers’ petition for reconsideration to EPA.⁶⁷

Regarding PM levels from glider vehicles, TTU’s letter indicated that the PM levels for all 13 test vehicles were “below the threshold detection point” and, consequently, no test data were presented.⁶⁸ This is a misleading statement. In fact, TTU did not measure PM at all. EPA staff confirmed in a recent discussion with TTU representatives (including Thomas Brewer, one of the authors of the TTU June 15, 2017 test summary letter), that TTU had not measured PM levels.⁶⁹ Instead, TTU had attempted to draw conclusions concerning PM levels via visual inspection and collected no PM emission data.⁷⁰ The report’s conclusion that “[a]ll vehicles met the standard” for PM⁷¹ is simply not supported by TTU’s testing because TTU conceded (only after follow-up inquiry) that it did not even measure PM emission levels for any of the test vehicles.

⁶⁵ Reconsideration Petition, Exhibit 1 Appendix A.

⁶⁶ *Id.* at Exhibit 1 pg 2, (concluding that “glider kit HDVs would emit less than 12% of the total NO_x and PM emissions, not 50%, for all Class 8 HDVs,” without providing any underlying analysis).

⁶⁷ *Id.* at pg. 5 (quoting the TTU finding on NO_x and PM).

⁶⁸ *Id.* at Exhibit 1 Appendix A.

⁶⁹ EPA TTU Memo at 3 (“TTU stated that no particulate matter samples were collected during testing. The sample probe filter used with the Enerac M500 was visibly inspected for particulate matter. Particulate quantification was subjective in that it was visual only. TTU stated that they performed a smoke test but did not elaborate.”).

⁷⁰ *Id.*

⁷¹ Reconsideration Petition at Exhibit 1 pg 1.

Finally, the TTU letter indicated that for NO_x, “all tested engines were higher than the standard and ranged from a low of 0.44 to a high of 6.45.”⁷² Without explanation, TTU omitted any vehicle-specific NO_x emission results; the only exception is a brief mention that a proprietary Fitzgerald engine design and set up had the lowest tested NO_x emissions, without any detail on the nature of the engine design or set up, most notably whether it included modern pollution controls, or what test cycles and procedures were used. One would expect that the higher NO_x levels would be associated with the Detroit Diesel Series 60 and CAT CT13 engines (no longer produced) as opposed to the more recently introduced Detroit Diesel DD15, but there is no way of knowing, since TTU did not report individual vehicle test values. Furthermore, NO_x levels would be highly dependent on test cycle and load conditions, and given that TTU did not provide this type of information, there is no way of evaluating their results. Accordingly, the TTU conclusion that “none of the vehicles met the standards” cannot be independently verified, and the degree to which any tested emissions exceeded the standards cannot be calculated, from the wholly inadequate information it has provided.

ii. The TTU Study’s Conclusions are Not Supported by Its Own Test Results

TTU reached the following conclusions: (1) “optimized and remanufactured 2002-2007 engines and OEM ‘certified’ engines performed equally as well and in some instances out-performed the OEM engines,” (2) “a glider remanufactured engine achieved the best result of any engine tested (see Appendix A),” and (3) “remanufactured and OEM engines experience parallel decline in emissions efficiency with increased mileage.”⁷³ Subsequently the glider industry cited these same conclusions in their reconsideration petition as support for their request for EPA to repeal glider provisions included in the heavy-duty Phase 2 final rule.⁷⁴ These conclusions, however, are not supported by the data supplied in the summary of the test program prepared by TTU.

First, TTU has not provided sufficient description of its test program to allow an independent assessment of their conclusions. As noted in the preceding section, the only vehicle specific numeric data provided were CO emission levels.⁷⁵ But CO emissions are not the pollutant of concern for EPA for the purpose of the Phase 2 Standards or this Proposed Rule. The pollutants of concern — the ones creating the manifest public health hazard — are NO_x and PM. Thus, TTU’s proffered conclusion that a glider vehicle achieved “the best result”—if based on the CO emission results, which is never clarified—is entirely misleading.

Second, the implication of conclusion (1) above is that the MY2002-2006 glider vehicles have the same NO_x and PM emissions as late model, fully compliant vehicles.⁷⁶ The publicly

⁷² *Id.* at Exhibit 1 Appendix A,.

⁷³ *Id.*

⁷⁴ *Id.* at 5,.

⁷⁵ *Id.* at Exhibit 1 App. A.

⁷⁶ EPA TTU Memo. All of the OEM trucks listed in Appendix A of TTU’s memo are equipped with Detroit Diesel’s DD15 engine. *Id.* Since this engine was first introduced in 2007, see Detroit Diesel Corporation, *World-Class in Every Respect: Detroit Diesel DD15 Debuts* (Oct. 19, 2007) available at <https://demanddetroit.com/our-company/media/press-releases/detroit-diesel-corporation-ddc-to-manufacture-2005-02-23>, all of these trucks should be installed in post-MY2007 trucks. Essentially all trucks after MY2007 are equipped with particulate traps which reduce PM emissions by more than 90% compared to pre-2007 trucks. See U.S. EPA, Memorandum in Reponse to

available information provides no evidence to substantiate this claim. As described above, TTU did not measure PM emission levels from any of the trucks and conceded that any inspection was “subjective”; accordingly, it is not possible for TTU to draw any conclusions regarding PM. Meanwhile, TTU inexplicably did not report any individual vehicle NOx emission test values. More generally, the summary report omits vital information on testing conditions that are essential to interpret and verify the report. Given that post-MY2007 trucks are equipped with exhaust aftertreatment, which inherently reduces NOx and PM emissions substantially compared to pre-MY2007 engines, it is not possible for this implied conclusion to be true unless the aftertreatment device was malfunctioning. The publicly available information provides no information to substantiate the implied claim that MY2002-2006 glider vehicles have the same NOx and PM emissions as late model, fully compliant vehicles.

Third, NOx and PM emissions levels are heavily impacted by test cycles and because of this EPA has carefully developed representative engine and vehicle test cycles and conditions to ensure accurate characterization of in-use emissions from heavy-duty vehicles and engines.⁷⁷ The test points and procedures that TTU used and later provided to the EPA by TTU are clearly inappropriate for use in assessing the in-use emissions from glider vehicles.⁷⁸ Their test points are clearly not representative of real truck operation: transient operation testing was not conducted; vehicle preconditioning is not appropriate; and the load and speed test points are arbitrary. Based on what TTU reported, it appears that they simply sampled emissions under a series of steady state test points, that even if measured properly, cannot be used to reach conclusions on engine/vehicle in-use emission performance.

Conclusion (3) also claims that emissions from both glider vehicles and “OEM” vehicles “decline in emission efficiency” with mileage. It appears that TTU is making the point that emissions performance deteriorates with increased mileage. This observation is irrelevant to the question of the emission impact of glider vehicles. This observation is irrelevant to the question of the emission impact of glider vehicles vis a vis trucks equipped with modern pollution controls. It is well established that emission levels generally increase with use not only for trucks but for all other mobile source categories. Furthermore, the design of the TTU test program does not allow an accurate assessment of in-use deterioration. To do so would have required the testing of the same vehicle over time or the testing of multiple vehicles of the same configuration with different accumulated mileages. The publicly available information on TTU’s study provides no indication that TTU performed this type of testing.⁷⁹

The record thus demonstrates that the TTU study does not support any conclusions related to the NOx and PM emission impacts of glider vehicles and engines. Its summary of the testing does not provide a sufficient level of detail to allow an independent review and validation of TTU’s

Petition for Rulemaking to Adopt Ultra-Low NOx Standards for On-Highway Heavy-Duty Trucks and Engines at 12 (Dec. 2016) *available at* <https://www.epa.gov/sites/production/files/2016-12/documents/nox-memorandum-nox-petition-response-2016-12-20.pdf>. Similarly, MY2010 and later trucks are equipped with NOx aftertreatment which reduces NOx emissions by 90% or more compared to pre-2007 trucks. *Id.*

⁷⁷ See 40 CFR part 86; 40 CFR part 1065; 40 CFR part 1036. See also EPA, Vehicle and Fuel Emissions Testing, Dynamometer Drive Schedules, <https://www.epa.gov/vehicle-and-fuel-emissions-testing/dynamometer-drive-schedules> (last visited Jan. 5, 2018).

⁷⁸ EPA TTU memo at 3 and Attachment B.

⁷⁹ *Id.* at p. 3 and Attachment B.

conclusions. The evidence in the record demonstrates that TTU's test program did not conform to well-established and standardized testing protocols and methods, TTU did not measure PM emissions, and the conclusions were presented in an inappropriate manner. As discussed in Section 1(f)(iii) below, subsequent follow up with TTU demonstrated that the Fitzgerald test facility is not properly configured to enable compliance with official EPA heavy-duty test procedures. Also, the fact that TTU's study was funded by a glider manufacturer, Fitzgerald Glider Kits, and TTU used a Fitzgerald test facility raises a clear appearance of conflict of interest, as discussed further below in Section 1(f)(iv). For these reasons, it would be arbitrary and capricious for the Agency to rely on the TTU report to support its Proposed Rule or any future deliberations regarding glider vehicles and engines.

iii. EPA's Own Memorandum and Study Further Contradict TTU's Conclusions

EPA included in the docket a memo from agency staff which described a telephone meeting with representatives from TTU to discuss the TTU test program.⁸⁰ The memo indicates that the testing was conducted at a Fitzgerald facility located in Rickman, Tennessee and performed by TTU staff and students. Based on Fitzgerald's website, this facility is a "collision and repair facility."⁸¹ Based on publicly available information, this facility does not appear to be equipped to conduct testing in conformity with EPA established and standardized test methods and procedures for emission testing heavy-duty trucks, which were developed to mirror true in-use operation.⁸² EPA's memo indicates that the facility, test equipment, and test procedures used by TTU were not consistent with what would be required to comply with EPA's well-established certification quality emission testing protocols, which are in widespread use in the emission characterization testing and evaluation field.⁸³ For example, the handheld emission analyzer, Enerac 500, used by TTU to measure emissions, is not an approved analytical technique under EPA's regulations and the resolution and accuracy specifications listed in the Enerac's own documentation does not meet the requirements as specified in EPA's testing regulations.⁸⁴ The EPA staff memo further confirms that TTU did not even measure one of the critical pollutants in question: particulate matter. The EPA memo provides additional evidence that the TTU work is inadequate and highlights some of the above described deficiencies of the TTU study.

As described above, EPA also included in the docket a staff technical report that summarized in detail the results from EPA's own emission testing of two glider vehicles equipped with remanufactured diesel engines originally certified in model years 1998 to 2002.⁸⁵ In contrast to

⁸⁰ EPA TTU Memo.

⁸¹ <https://fitzgeraldcollision.com/freightliner-facility/>

⁸² See 40 CFR part 86; 40 CFR part 1065; 40 CFR part 1036. See also EPA, Vehicle and Fuel Emissions Testing, Dynamometer Drive Schedules, <https://www.epa.gov/vehicle-and-fuel-emissions-testing/dynamometer-drive-schedules> (last visited Jan. 5, 2018); National Renewable Energy Laboratory, Drive Cycle Analysis Tool – DriveCAT, <https://www.nrel.gov/transportation/drive-cycle-tool/> (last visited Jan. 5, 2018).

⁸³ See 40 CFR part 1065; 40 CFR part 1036.

⁸⁴ See 40 CFR part 1065; EPA TTU memo Attachment on Enerac 500.

⁸⁵ U.S. Environmental Protection Agency, Chassis Dynamometer Testing of Two Recent Model Year Heavy-Duty On-Highway Diesel Glider Vehicles, Nov. 20, 2017, Docket No. EPA-HQ-OAR-2014-0827-2417, <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-2417>.

TTU's less than four-page letter, EPA's 40-page test report carefully described all aspects of testing and provided all relevant emission data collected as part of the test program. The EPA test program confirmed earlier estimates of glider vehicle emissions included in the heavy-duty Phase 2 Standards and found that results were "consistent with expected emissions performance of heavy-duty diesel engines manufactured in the 1998-2002 timeframe." EPA also found that both glider vehicles tested had emission levels that were "consistently higher than those of conventionally manufactured 2014 and 2015 tractors." In fact, EPA's testing found that glider vehicles had (1) NO_x emissions that were as much as 43 times higher than 2014 and 2015 tractors under cruise conditions, (2) PM emissions that were as much as 55 times higher than 2014 and 2015 tractors under cruise conditions, and (3) PM emissions that were 50 to 450 times higher than 2014 and 2015 tractors under transient conditions.⁸⁶

EPA inexplicably failed to consider both documents in its Proposed Rule even though both the staff memo and the test report were available at the time or shortly after the Proposed Rule was issued. Instead, EPA presented the results of the TTU test program unchallenged even though the Agency had information that demonstrated that the TTU study was flawed and also possessed EPA test data that refuted it. Going forward, EPA must fully reflect this information and data in its glider vehicle deliberations.

iv. TTU's relationship with Fitzgerald Glider Kits raises further concerns about the objectivity of the TTU study.

The TTU study was funded by Fitzgerald Glider Kits, which has also recently entered into a new partnership with TTU.

TTU's financial reports show that in June, 2016, Fitzgerald Glider Kits gave a grant of \$70,056 for the study,⁸⁷ and then later in September, 2016, Fitzgerald Glider Kits gave an additional grant of \$12,500.⁸⁸ As discussed above, an EPA memo to the record indicates that the testing took place at a Fitzgerald facility.⁸⁹

Additionally, in August 2017, Philip Oldham and Thomas Brewer announced TTU's "new partnership" with the Fitzgerald companies and another higher education institution.⁹⁰ As part of this partnership, the new Fitzgerald Technology Complex will be constructed in the Fitzgerald Industrial Park, in White County, Tennessee.⁹¹ The Complex will house TTU's Center for

⁸⁶ *Id.* at 3.

⁸⁷ Tenn. Tech. University Office of Research, *Tennessee Technological University Annual Report 2015-16 (Volume 2)* 42 (2016), available at https://www.tntech.edu/assets/userfiles/resourcefiles/13847/1476976572_2015-16%20Annual%20Report_FINAL.pdf.

⁸⁸ Tenn. Tech. University, *Grants Rewarded Report (09/01/2016 – 09/30/2016)*, available at https://www.tntech.edu/assets/userfiles/resourcefiles/9512/1481215150_Grants%20Awarded%20Sept%202016.pdf; see also Tenn. Tech. University, *Academic Affairs Highlights 25* (2017), available at https://www.tntech.edu/assets/usermedia/provost/12546/2017_End_of_the_Year_Statement.pdf.

⁸⁹ EPA TTU Memo at 2.

⁹⁰ <https://www.tntech.edu/news/releases/tennessee-tech,-tcat-livingston,-fitzgerald-companies-announce-new-partnership>.

⁹¹ *Id.*

Intelligent Mobility⁹² The 80,000 square foot Center will be completed in 2018.⁹³ Fitzgerald Collision & Repair also announced a new vocational program that will offer students from the partnership “training in commercial fleet truck maintenance and repair.”⁹⁴ The cost of the new facility in White County and how much money each entity in the partnership will contribute to the project was not announced.

EPA must base its decision-making on its expert judgment, relying on the best available science and evidence.⁹⁵ TTU’s materials fall far short, providing insufficient rigor or transparency to substantiate the conclusions they claim. EPA’s invocation of this information as support for this rulemaking is legal error.

Errata: EDF modeling based on revised sales estimates, not revised emission factors

- g. ***EDF modeling using revised emission factors based on EPA’s recently published data indicates NOx and PM emissions from glider vehicles could exceed the emission inventory for all other heavy-duty vehicles in 2025.***

As described above, EPA included in its 2016 Phase 2 Standards an analysis of the environmental impacts of glider vehicles.⁹⁶ EPA found that glider vehicles would have NOx and PM emissions 20-40 times higher than current vehicles and that these excess emissions would result in numerous and significant adverse health effects including premature mortality.⁹⁷ EPA projected the excess emissions and adverse health impacts associated with glider vehicles assuming glider sales would reach and then plateau at 10,000 units per year (about 5% of sales of Class 8 trucks⁹⁸). EPA thus assumed that if glider vehicles continued to be exempted from pollution standards, sales volumes would not increase from current levels.

However, in the Phase 2 Standards, EPA acknowledged that glider vehicle sales could be greater than the 10,000 unit estimate,⁹⁹ and several stakeholders who testified at EPA’s December 4, 2017 hearing indicated that if the glider provisions were repealed, sales would be much higher.¹⁰⁰ In fact, several truck dealers and truck repair facilities testified that gliders sales could reach 25 to 30% of annual truck sales.¹⁰¹

⁹² *Id.*

⁹³ Laura Militana, *Tennessee Tech Center for Intelligent Mobility Announced*, Cookeville Herald Citizen (Jan. 5, 2018), available at <http://herald-citizen.com/stories/tennessee-tech-center-for-intelligent-mobility-announced,22605>.

⁹⁴ *Id.*

⁹⁵ *Motor Vehicles Manufacturers Ass’n v. State Farm*, 463 U.S. 29, 43 (1983).

⁹⁶ HDP2 Response to Comments pp. 1960-1968.

⁹⁷ HDP2 Rule, 81 Fed. Reg. at 73,943.

⁹⁸ Statista, U.S. Class 8 truck sales from 2007 to 2016, by brand (in 1,000s), <https://www.statista.com/statistics/245369/class-8-truck-sales-by-manufacturer/> (last visited Jan. 5, 2018); FleetOwner, Class 8 orders continue to roll (Aug. 3, 2017), available at <http://www.fleetowner.com/trucks/class-8-orders-continue-roll>.

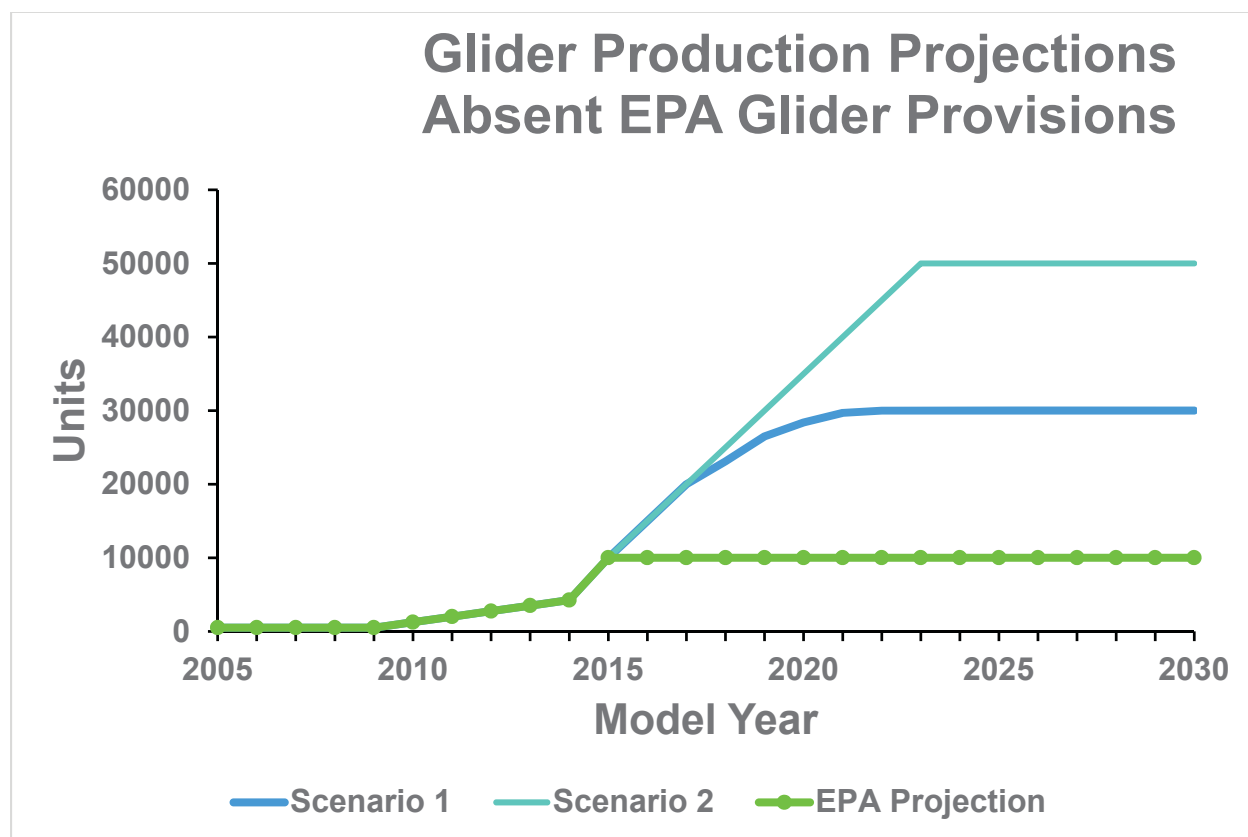
⁹⁹ HDP2 Rule, 81 Fed. Reg. at 73,943; HDP2 Response to Comments pg. 1960.

¹⁰⁰ Testimony of John C. Doub, TMI Truck and Equipment, Docket ID No. EPA-HQ-OAR-2014-0827-4285 (Dec. 4, 2017), available at <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-4285> (“If [EPA repeals the glider provisions], our lost sales to Glider Kits each Month could grow from the 10% it is today to what could be 30+%.”).

¹⁰¹ *See, e.g.*, Testimony of Michael P. McMahon, McMahon Truck Centers, Docket ID No. EPA-HQ-OAR-2014-0827-4300 (Dec. 4, 2017), available at <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-4300> (“We estimate losing approximately 25% of our annual New Truck retail volume to Glider Kits.”).

EDF has conducted an analysis to ascertain the emission and health impact of higher glider vehicles sales projections. As we show below, these deleterious impacts are substantial. NOx and PM emissions from glider vehicles could approach or exceed the entire NOx and PM emission inventory for all other heavy-duty vehicles in 2025. The results of this analysis are summarized below and presented in detail in Appendix X.

Consistent with the testimony presented at the hearing, we analyzed two additional sales scenarios, peaking at 30,000 and 50,000 units per year respectively. The record suggests that the on-road heavy-duty diesel fleet has not even reached equilibrium with respect to any of the sale scenarios analyzed above including EPA’s—underscoring that glider vehicles could continue to increase as a fraction of the on-road fleet for decades. The graph below shows these two sales scenarios compared with the projection used by EPA.



In analyzing the impact of the above scenarios, we followed EPA’s methodology including the use of EPA’s per vehicle emission estimates for gliders described in Appendix A to the Response to Comments to the extent possible.¹⁰² Our methodology and assumptions are described in detail in Appendix X which is attached to our comments. The table below presents the NOx and PM impacts for both Scenario 1 (30,000 glider units produced per year by 2022) and Scenario 2

¹⁰² HDP2 Response to Comments pp. 1960-1968.

(50,000 glider units produced per year by 2023). The EPA emission impacts for 10,000 units is also presented for comparison purposes.

Glider Kit Emission Impacts Under Three Sales Scenarios (in US tons per year of sales)						
	EPA Sales Scenario		Sales Scenario 1		Sales Scenario 2	
2025	NOx	PM	NOx	PM	NOx	PM
Without Controls	295,000	7800	727,723	19,241	1,004,698	26,565
With Controls	104,800	2750	131,766	3,458	131,766	3,458
Difference	190,200	5050	595,957	15,784	872,933	23,107
2040						
Without Controls	371,100	9960	1,078,731	28,952	1,745,242	46,841
With Controls	52,600	1410	64,406	1,726	64,406	1,726
Difference	318,600	8550	1,014,325	27,226	1,680,836	45,114

The emission impacts as estimated by EPA’s modeling, assuming static glider sales, are already extremely consequential. The deleterious NOx and PM impacts associated with EPA’s Proposed Rule if glider sales grow, as they are expected to do, are even more substantial. If sales grow to 30,000 units by 2022 (or about 15% of tractor sales), the NOx impacts from glider vehicles will be larger than the entire NOx inventory for all heavy-duty vehicles in 2025. By 2040, the impacts will be more than double the entire heavy-duty inventory in 2040.¹⁰³ The NOx increases from glider vehicles will offset, in the 2025 to 2040 timeframe, about a third of the total reductions expected to occur due to the application of aftertreatment to heavy-duty diesel vehicles.¹⁰⁴

The PM increase due to glider vehicles will represent about 60% and more than 80% and of the entire PM inventory for all heavy-duty vehicles in 2025 and 2040, respectively.¹⁰⁵ Similarly, the expected PM increases will offset, in the 2025 to 2040 timeframe, about 25% of the reductions expected from EPA’s 2007/2010 aftertreatment standards for heavy-duty vehicles.¹⁰⁶ For Scenario 2 (50,000 units by 2023 or about 25% of total tractor sales) results are even more damaging. The impacts are at least 50% larger in all cases compared to Scenario 1 impacts. Overall, in 2025, the benefits that would accrue from ensuring glider vehicles achieve modern pollution standards increase 3.1 to 4.6 times depending on the scenario and compared to EPA’s final rule benefit estimates. In 2040, the benefits increase 3.2 to 5.3 times.

¹⁰³ Regulatory Impact Analysis: Heavy-Duty Engine and Vehicle Standards and Highway Diesel Sulfur Control Requirements, December 2000, EPA420-R-00-026, pg II-136.

¹⁰⁴ Control of Air Pollution From New Motor Vehicles: Heavy-Duty Engine and Vehicle Standards and Highway Diesel Fuel Sulfur Control Requirements; Final Rule, 66 Fed. Reg. 5031 (Jan. 18, 2001).

¹⁰⁵ Regulatory Impact Analysis: Heavy-Duty Engine and Vehicle Standards and Highway Diesel Sulfur Control Requirements, December 2000, EPA420-R-00-026, pg II-126.

¹⁰⁶ Control of Air Pollution From New Motor Vehicles: Heavy-Duty Engine and Vehicle Standards and Highway Diesel Fuel Sulfur Control Requirements; Final Rule, 66 Fed. Reg. 5032 (Jan. 18, 2001).

Our modeling also assessed the health impacts associated with these emissions. In the Phase 2 Standards, EPA estimated that ensuring 5,000 to 10,000 2017 glider vehicles meet modern pollution standards would prevent 350-1,600 premature mortalities over the lifetime of the vehicles, leading to PM_{2.5}-related health benefits valued at \$1.5 to 11.0 billion.¹⁰⁷

EPA's estimates were based on a relationship between annual emissions from 17 distinct emission sources and PM-related health impacts (and their monetary benefits).¹⁰⁸ These relationships were developed using a three-step process, described as follows in EPA's report¹⁰⁹:

- 1) Use source apportionment photochemical modeling to predict ambient concentrations of primary PM_{2.5}, nitrate and sulfate attributable to each of 17 emission sectors across the Continental U.S. (On-road emission sources are one of the 17 sectors addressed by the modeling);
- 2) For each sector, estimate the health impacts, and the economic value of these impacts, associated with the attributable ambient concentrations of primary PM_{2.5}, sulfate and nitrate PM_{2.5} using the environmental Benefits Mapping and Analysis Program (BenMAP v4.0.66);
- 3) For each sector, divide the PM_{2.5}-related health impacts attributable to each type of PM_{2.5}, and the monetary value of these impacts, by the level of associated precursor emissions. That is, primary PM_{2.5} benefits are divided by direct PM_{2.5} emissions, sulfate benefits are divided by SO₂ emissions, and nitrate benefits are divided by NO_x emissions.

This modeling tool was developed for use in support of various actions being considered or taken by EPA.¹¹⁰ It provides mid-range health effects and benefits, as opposed to worse-case estimates (e.g., 90th or 95th percentile effects).¹¹¹ According to EPA, this methodology does not account for cancer due to diesel PM exposure (a likely human carcinogen) nor does it account for reductions in premature mortality and other benefits resulting from exposure to other criteria pollutants (e.g. ozone).¹¹² The unquantified ozone related benefits are likely significant given the large NO_x impacts from glider vehicles.¹¹³ For a detailed discussion of the methodology please refer to Appendix X and EPA's Response to Comments.¹¹⁴

The table below shows the results of applying EPA's above-described methodology to the alternative glider sale scenarios in calendar year 2025. This analysis represents the impact on

¹⁰⁷ HDP2 Response to Comments pg. 1965.

¹⁰⁸ Technical Support Document, "Estimating the Benefit per Ton of Reducing PM_{2.5} Precursors from 17 Sectors," U.S. Environmental Protection Agency, Office of Air and Radiation, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711, January 2013.

¹⁰⁹ *Id.* At 3.

¹¹⁰ HDP2 RTC pg. 1968.

¹¹¹ Technical Support Document, "Estimating the Benefit per Ton of Reducing PM_{2.5} Precursors from 17 Sectors," U.S. Environmental Protection Agency, Office of Air and Radiation, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711, January 2013, pg 3.

¹¹² HDP2 RTC pg. 1968.

¹¹³ *Id.*

¹¹⁴ HDP2 Response to Comments pp. 1960-1968.

2025 emissions and their related health effects from ensuring that 2018 and later glider vehicles meet existing pollution standards. We also performed this analysis using an alternative, comparable EPA model referred to as COBRA.¹¹⁵ The results of this analysis produced health impacts that were very similar to EPA’s methodology described above. The detailed results can be found in Table 8 of Appendix X to these comments.

Health Benefits and Health Improvements from Glider Kit Controls in 2025			
Glider Kit Sales Scenario	EPA	Scenario 1	Scenario 2
Emission Reductions due to Controls: NOx	190,200	596,497	873,960
(U.S. tons per year) PM	5,050	15,798	23,134
Monetized NOx+PM Benefits (\$2013 billion)	3.2-8.0	10.0-24.9	14.6-36.5
Premature Mortality	396-914	1240-2862	1816-4162
Morbidity			
Respiratory emergency room visits	228	715	1,047
Acute bronchitis	630	1,973	2,889
Lower respiratory symptoms	8,070	25,271	37,015
Upper respiratory symptoms	11,700	36,643	53,672
Minor Restricted Activity Days	321,892	1,008,045	1,476,488
Work loss days	54,134	169,528	248,309
Asthma exacerbation	29,028	90,906	133,151
Cardiovascular hospital admissions	151	471	690
Respiratory hospital admissions	124	388	569
Non-fatal heart attacks (Peters)	477	1,493	2,187
Non-fatal heart attacks (All others)	52	162	237

Under EPA’s 10,000-per-year sales projections, the health benefits from the Phase 2 glider provisions are valued at \$3.2-8.0 billion in 2025. Under Scenario 1 and Scenario 2, the PM_{2.5} health benefits of ensuring glider vehicles achieve modern pollution standards are even more substantial, at least \$10 billion to nearly \$40 billion per year.

Even though EPA’s sales projection of 10,000 glider vehicles is probably conservative, it still shows health impacts that are very substantial. If the Proposed Rule is finalized, evidence suggests that glider vehicle sales would likely grow beyond current levels (10,000 units). For these higher sales scenarios, our analysis shows that the NOx impacts will be greater than the entire NOx inventory for heavy-duty vehicles and excess PM emissions will be 60 to 80% of the entire inventory in the 2025 to 2040 timeframe. The estimated monetized health costs (from

¹¹⁵ COBRA was developed specifically for use in local and state assessments of energy and environmental programs. The steps used in its development are very similar to those listed above for the regulatory impact analysis tool used by EPA. One relevant aspect of COBRA is that on-road mobile sources are broken down into several categories, including heavy-duty diesel vehicles. *See* User’s Manual for the Co-Benefits Risk Assessment Health Impacts Screening and Mapping Tool (COBRA), Version: 3.0, U.S. EPA, September 2017.

PM_{2.5} reductions alone) that would come from ensuring glider vehicles achieve modern pollution standards ranges from at least \$10 to \$40 billion in calendar year 2025. It is arbitrary and unlawful for the agency to be considering rolling back the regulations on glider vehicles without considering these dramatic public health implications, as discussed further in Section VII.

h. Glider vehicles are not comparable to older, higher emitting vehicles.

The Agency solicits comment on the issue of whether glider vehicles are “less polluting than the older trucks they would replace” and also solicits comment on whether “a glider vehicle is ... a suitable option for those small businesses and independent operators who cannot afford to purchase a new vehicle, but who wish to replace an older vehicle with a vehicle that is equipped with up-to-date safety features.”¹¹⁶ This solicitation rests on multiple flawed premises.

First of all, Section 202 requires EPA to reduce pollution from new motor vehicles, as discussed in detail in Section V below. The agency cannot discharge that duty by simply asserting that new vehicles are less polluting than old vehicles, regardless of which classes of vehicles are in direct competition. In any event, the factual circumstances here make clear that equating new glider vehicles to used, highly polluting freight trucks is not an appropriate comparison.

Warrantees that are offered for glider vehicles are comparable to those for other model year 2017 class 8 trucks, covering hundreds of thousands of miles and several years.¹¹⁷ By comparison, used, end of life freight trucks would not offer the same possibility for guaranteed additional miles of use. Taking old, ready-to-retire trucks off the road and replacing them with glider vehicles would yield significant additional mileage of operation and therefore substantial additional volumes of PM and NO_x.

Glider vehicles are advertised as “brand new trucks.”¹¹⁸ The website of one glider company states: “The advantages really stack up to make a glider kit a great option when purchasing a new truck.”¹¹⁹ The fully built trucks listed for sale on the same company’s website are listed as “NEW.”¹²⁰ A different glider company’s website states that a “Glider Kit comes to you as a

¹¹⁶HDP2 Rule, 82 Fed. Reg. 53447-448.

¹¹⁷ Appendix C; Fitzgerald Glider Kits, Warranty Options, <https://www.fitzgeraldgliderkits.com/warranty> (last accessed Jan. 3, 2018) (offering warranties of 3 years/300,000 miles or 5 years/500,000 miles for glider vehicles); Peterbilt Cummins, Every Coverage: North American Truck Coverages For 2017 X15™ And ISX12 Engines (Jan. 2017), <https://peterbilt.cummins.com/brochure-download.aspx?brochureid=1443> (indicating a base warranty of 2 years/250,000 miles, plus additional protection plans for 3-6 years/100,000-600,000 miles, for new freight trucks); *see also* Peterbilt Cummins, List of Warranties and Extended Coverage, <https://peterbilt.cummins.com/warranty> (last accessed Jan. 3, 2018); National Truck Protection, Warranty Plans – NTP Standard Plans, <http://www.ntpwarranty.com/warranty-plans> (last accessed Jan. 3, 2018) (offering a 3 years/300,000 miles independent warranty for new or used freight trucks).

¹¹⁸ *See* Appendix D, E; *See* HDP2 Rule, 81 Fed. Reg. at 73514 (quoting Fitzgerald website at the time of the rulemaking in 2016).

¹¹⁹ Appendix E; Fitzgerald Glider Kits, *What is a Glider Kit?*, <https://www.fitzgeraldgliderkits.com/what-is-a-glider-kit> (last accessed Jan. 3, 2018).

¹²⁰ Appendix D; Fitzgerald Glider Kits, Sales inventory page, <http://trucks.fitzgeraldgliderkits.com> (last accessed Jan. 3, 2018).

brand-new, complete assembly.”¹²¹ Glider vehicles are newly titled in the state of purchase, and come with new ID numbers.¹²²

It is inaccurate to assert that replacing an older freight truck with a glider vehicle would provide “up-to-date safety features.” Glider vehicles lack the essential safety features found in modern trucks. Because these engines lack modern electronic capacity, they lack all of the safety features enabled by those electronics. These features include electronic stability control (to prevent rollover), collision avoidance, automatic emergency brakes, and excess speed control.¹²³ Moreover, pre-2002 engines are exempt from the requirement to keep an electronic log book (e-log). The e-log provides real time monitoring of drivers’ hours travelled and rest time. The lack of an e-log enables vehicle operation for longer periods than allowed by safety standards.¹²⁴ For these and other reasons, NHTSA articulated concerns about glider vehicle safety.¹²⁵ So in addition to emitting significantly more pollution than other new trucks, glider vehicles are also less safe to operate.

Glider vehicles are regularly sold at prices that are comparable to new freight trucks with modern emission control equipment. On the website of one glider company, the majority of fully built daycab model year 2017 year glider vehicles are advertised for above \$150,000 to as much as \$369,000.¹²⁶ Online freight truck listings similarly include numerous listings for new glider vehicles in this price range.¹²⁷ These prices are comparable to, or even higher than, the price of a 2017 model year class 8 tractor that meets modern emission standards.¹²⁸ Meanwhile, there are

¹²¹ Harrison Truck Centers, Glider Kits, <http://www.htctrucks.com/index.php/sales/harrison-truck-centers-glider-kits> (last accessed Jan. 3, 2018).

¹²² 81 Fed. Reg. 73514 n. 83.

¹²³ See NHTSA, Electronic Stability Control Systems on Heavy Vehicles at III-1 (May 2012) (explaining that an ESC system “utilizes computers to control individual wheel brake torque and assists the driver in maintaining control of the vehicle”), https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/136_esc_hvy_veh_pria.pdf; Testimony of Robert Nuss, Nuss Truck & Equipment, Docket ID No. EPA-HQ-OAR-2014-0827-4307 (Dec. 4, 2017), available at <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-4307> (“Glider kits do not meet the current diesel engine emissions standards, nor do they typically include the latest advanced truck safety enhancements, including roll stability, adaptive cruise control and lane departure warnings to better assure public safety.”)

¹²⁴ See also 80 Fed. Reg. 40530 (July 13, 2015).

¹²⁵ Id.

¹²⁶ Fitzgerald Glider Kits, Sales inventory page, trucks.fitzgeraldgliderkits.com/ (last accessed January 5, 2018).

¹²⁷ Truck Paper, Glider Kit Trucks for Sale, <https://www.truckpaper.com/listings/trucks/for-sale/list/category/15101/heavy-duty-trucks-glider-kit-trucks?sortorder=9&SCF=False> (last accessed Jan. 3, 2018); see also <https://www.commercialtrucktrader.com/Glider...Trucks.../search-results?>

¹²⁸ See Truck Paper, Peterbilt Conventional Trucks w/o Sleeper for Sale, <https://www.truckpaper.com/listings/trucks/for-sale/list/category/211/heavy-duty-trucks-conventional-trucks-w-o-sleeper/manufacture/peterbilt?sortorder=9&SCF=False> (last accessed Jan. 3, 2018); Truck Paper, Volvo Conventional Trucks w/o Sleeper for Sale, <https://www.truckpaper.com/listings/trucks/for-sale/list/category/211/heavy-duty-trucks-conventional-trucks-w-o-sleeper/manufacture/volvo?sortorder=9&SCF=False> (last accessed Jan. 3, 2018); Commercial Truck Trader, New Standard Cab Class 8 Heavy Duty Trucks For Sale, <https://www.commercialtrucktrader.com/New-Standard-Cab-Class-8-Heavy-Duty-Trucks-For-Sale/search-results?condition=N&cabtype=STANDARD+CAB&make=FREIGHTLINER|2310628,INTERNATIONAL|2311614,PETERBILT|2313546,VOLVO|2314540&type=class8> (last accessed Jan. 3, 2018); Jason Cannon, *What does a Class 8 truck really cost?*, Commercial Carrier Journal (Jan. 25, 2016) <https://www.ccjdigital.com/what-does-a-class-8-truck-really-cost/>, (discussing the cost of Model Year 2016 class 8 freight trucks).

readily available, cheaper and safer alternatives for buyers who cannot afford a current model year vehicle. Numerous used model year 2014, 2015, and 2016 class 8 trucks are advertised in public listings with prices well below \$100,000.¹²⁹ These model year 2014 and later used trucks come with modern pollution controls and safety features, so are at least 90% less polluting than glider vehicles and safer to operate.

Accordingly, the agency's request for comment on these issues is misdirected. The appropriate comparison of emissions impact should be with the other new trucks, not to older, used trucks. The agency's Proposed Rule included no evaluation supporting these assertions in its Proposed Rule, and accordingly the agency has no reasonable basis to reject factual conclusions reached in the Phase 2 Standards on the basis of these unsupported claims.¹³⁰ Were the agency to prepare any such analysis, EPA would need to issue a new proposal to allow the public a full opportunity to review and respond to such material, as well as respond to the public's input.¹³¹

i. Record evidence demonstrates that glider vehicle sales are at least 10,000 per year, if not higher, with potential for further growth.

EPA's 2016 Final Rule estimated that glider vehicle annual sales were approximately 10,000 per year. No record evidence contradicted this finding. More recently, EPA included a Nov. 15, 2017 redacted memo in the record on glider vehicle sales showing that glider vehicles reached a peak of "significantly over 10,000" sales in a year.¹³² At the Dec. 4, 2017 public hearing that EPA held on the proposed repeal, industry representatives testified to their personal experience with the growing glider industry and provided assessments of glider vehicle market share in line with the data showing sales significantly over 10,000 per year.¹³³ Meanwhile, additional evidence suggests that EPA's 2016 estimate of 10,000 sales per year may have been an underestimate.¹³⁴ At minimum, EPA has not provided any evidence to justify its assumption that glider vehicle sales would stop growing and flatline at 10,000 vehicles per year—a key assumption employed as part of developing the agency's 2016 glider pollution estimates.

¹²⁹<https://www.kenworthsalesco.com/class-8-trucks-for-sale/> (accessed December 23, 2017).

¹³⁰ See Section VII.

¹³¹ See Section VII(d).

¹³² Redacted Letter from Charles Moulis to William Charmley, Nov. 15, 2017, EPA-HQ-OAR-2014-0827-2379, available at <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-2379>.

¹³³ See, e.g., Testimony of Michael P. McMahon, McMahon Truck Centers, Docket ID No. EPA-HQ-OAR-2014-0827-4300 (Dec. 4, 2017), available at <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-4300> ("We estimate losing approximately 25% of our annual New Truck retail volume to Glider Kits."); Testimony of Robert Nuss, Nuss Truck & Equipment, Docket ID No. EPA-HQ-OAR-2014-0827-4307 (Dec. 4, 2017), available at <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-4307> ("The glider kit market today is about 5% of the new heavy duty truck market.").

¹³⁴ Adding additional cites/appendix. See, e.g., Fitzgerald Glider Kits, What Is A Glider Kit, available at <https://www.fitzgeraldgliderkits.com/what-is-a-glider-kit> ("THE FUTURE OF GLIDER KITS: Looking into the future, most manufactures are making newer model trucks available as a Glider. The most recent offering is from Peterbilt with the introduction of the Peterbilt 579 as a Glider Kit. We are also constantly working to offer different engine platforms in our Glider Kits. Year after year Fitzgerald Glider Kits as a company continues to grow giving our customers more options in glider kits, better services, and an ever growing warranty network across the U.S.").

Furthermore, testimony at the Dec. 4 public hearing also indicated that glider sales may continue to expand further if pollution standards are rolled back, both due to production level from glider vehicle manufacturers, and from truck manufacturers who do not primarily manufacture glider vehicles, but will be compelled to join the glider market in order to maintain competitiveness.¹³⁵

Additional growth in glider vehicle sales would undermine--on an even larger scale--the common sense pollution reductions gained through heavy-duty standards. Yet EPA did not consider the potential for further, unlimited expansion of glider vehicle sales in its proposal. The potential for an even greater magnitude of growth in gliders, with the potential for even more substantial emission consequences and greater jeopardy to heavy-duty emissions controls, presents a severe threat to public health. Given the considerable evidence in the record suggesting that such growth is possible and in fact likely, EPA's failure to consider or evaluate this grave possibility is unlawful.¹³⁶

II. The benefits of freight truck pollution standards substantially exceed the costs.

In the agency's 2016 Phase 2 Standards, EPA's monetary evaluation of the benefits of closing the glider loophole, using PM-related benefit-per-ton values, found that removing all unrestricted glider vehicle emissions would yield between \$6 to \$14 billion in annual benefits (2013\$).¹³⁷ Again, this analysis is conservative because it does not include the benefits of reducing carcinogenic diesel particulates or ozone formation attributable to gliders' high NOx emissions.

As EPA noted in that rulemaking, the agency has long since justified the reasonableness of pollution control standards for heavy-duty freight trucks.¹³⁸ The benefits of reducing pollution from freight trucks far outweigh the costs, as indicated by the value of the diesel criteria pollution standards issued by EPA in 2000 and early 2001.¹³⁹ The 2000 and 2001 heavy duty diesel criteria pollution rules have a benefit to cost ratio of nearly 17 to 1—providing over \$70.4 billion in monetized benefits, in addition to considerable un-monetized public value.¹⁴⁰ The agency identified the tangible impacts of those benefits as reductions in premature deaths, chronic bronchitis, hospital and ER visits, and asthma attacks, among other benefits.¹⁴¹ As EPA concluded in the Phase 2 Standards, the costs of the glider provisions have already been duly

¹³⁵ See, e.g. Testimony of John C. Doub, TMI Truck and Equipment, Docket ID No. EPA-HQ-OAR-2014-0827-4285 (Dec. 4, 2017), available at <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-4285> (“If [EPA repeals the glider provisions], our lost sales to Glider Kits each Month could grow from the 10% it is today to what could be 30+%.”)

¹³⁶ See discussion in Section VII.

¹³⁷ 81 Fed. Reg. at 73943 (October 25, 2016).

¹³⁸ Proposed HDP2 Rule, 80 Fed. Reg. 40,137, 40,528-29 (July 13, 2015).

¹³⁹ EPA, Final Rule: Emissions Control, Air Pollution From 2004 and Later Model Year Heavy-Duty Highway Engines and Vehicles, 65 Fed. Reg. 59,895 (Oct. 6, 2000); EPA, Final Rule: Control of Air Pollution From New Motor Vehicles: Heavy-Duty Engine and Vehicle Standards and Highway Diesel Fuel Sulfur Control Requirements, 66 Fed. Reg. 5,001 (Jan. 18, 2001).

¹⁴⁰ 66 Fed. Reg. 5,001, 5,107-08 (Jan. 18, 2001); EPA, Regulatory Impact Analysis: Heavy-Duty Engine and Vehicle Standards and Highway Diesel Fuel Sulfur Control Requirements at xvi (Dec. 2000).

¹⁴¹ EPA, RIA for Heavy-Duty Standards at Ch. VII (D) (Dec. 2000).

justified, in both the criteria pollution rule and the Phase 1 fuel economy and greenhouse gas (GHG) rule.¹⁴²

EPA carefully considered impacts to small businesses including glider manufacturers as part of the Phase 2 rulemaking, and the final Phase 2 Standards include provisions arising from these efforts. See Section XI(b). While glider vehicle manufacturers and purchasers will incur the cost associated with current model year engines, as noted above, these are the same costs EPA has long-since found reasonable for all other manufacturers and purchasers of new heavy duty diesel engines.¹⁴³

III. The Proposal has particularly harmful implications for communities already overburdened by diesel truck pollution.

EPA’s Proposed Rule fails to address the requirement imposed by Executive Order 12,898¹⁴⁴ to analyze the environmental justice (“EJ”) impacts of its actions. The proposal concedes: “We have not evaluated the impacts on minority, low-income or indigenous populations that may occur as a result of the proposed action to rescind emissions requirements for heavy-duty glider vehicles and engines.”¹⁴⁵

This omission is deeply concerning as the proposal will increase diesel freight truck pollution, which harms all communities, but which is known to have disproportionately high and adverse human health and environmental impacts on the low-income communities of color that are often located near roadways, ports, and facilities that bring high flows of freight truck traffic through these communities.¹⁴⁶ Moreover, the latest EPA emission testing suggests that the glider vehicle PM emissions are at their most disproportionate under transient (non-highway) conditions—the likely conditions when driving through communities.¹⁴⁷ The exclusion of the required environmental justice analysis is just one of a number of omissions in this rulemaking process that demonstrate the agency is acting arbitrarily without giving proper consideration to key issues. See Section VII.

a. Environmental justice communities face barriers to public participation

¹⁴² HDP2 Rule, 81 Fed. Reg. at 73,518; *see also* Proposed HDP2 Rule, 80 Fed. Reg. at 40,528-29.

¹⁴³ See 80 FR 405294052940528.

¹⁴⁴ Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, 59 Fed. Reg. 7,629 (Feb. 16, 1994).

¹⁴⁵ 82 Fed. Reg. 53,442, 53,448.

¹⁴⁶ *See, e.g.,* Douglas Houston, Margaret Krudysz, and Arthur Winer, *Diesel Truck Traffic in Low-Income and Minority Communities Adjacent to Ports*, Transportation Research Record: Journal of the Transportation Research Board, No. 2067, Transportation Research Board of the National Academies, Washington, D.C., 2008, pp. 38–46 at 39, <https://escholarship.org/uc/item/0pk400m7> (“Minority and high-poverty neighborhoods in Southern California bear more than twice the level of traffic density as the rest of the region, suggesting that these communities may be disproportionately exposed to concentrated near-roadway air pollution. Such exposures often occur in the context of structural inequalities, including racial segregation, a lack of economic opportunity, disinvestment, and declining property values.”)

¹⁴⁷ U.S. Environmental Protection Agency, Chassis Dynamometer Testing of Two Recent Model Year Heavy-Duty On-Highway Diesel Glider Vehicles, Nov. 20, 2017, pg. 3, Docket No. EPA-HQ-OAR-2014-0827-2417.

By omitting any analysis from the Proposed Rule, not only is EPA failing to properly consider the adverse consequences of its action, but it also is impeding the public's ability to understand the impacts of this proposed rule and their ability to provide informed comment during the rulemaking process. The Office of Management and Budget has explained that the purpose of a regulatory analysis is "to anticipate and evaluate the likely consequences of rules" and that "[a] good regulatory analysis is designed to inform the public and other parts of the Government (as well as the agency conducting the analysis) of the effects of alternative actions."¹⁴⁸

As explained in EPA technical guidance, at minimum, a sufficient environmental justice assessment from EPA would ask and address: (1) "Are there potential EJ concerns associated with environmental stressors affected by the regulatory action for population groups of concern in the baseline?" (2) "Are there potential EJ concerns associated with environmental stressors affected by the regulatory action for population groups of concern for the regulatory option(s) under consideration?" and (3) "For the regulatory option(s) under consideration, are potential EJ concerns created or mitigated compared to the baseline?"¹⁴⁹ The Proposal Rule concedes that EPA has not evaluated this type of clearly relevant information.

Environmental justice communities already face additional barriers to participating in agency rulemaking processes—such as facing language and cultural differences, lacking notice about their role as stakeholders in agency actions, and lacking technical knowledge and assistance to participate effectively—that make agency analysis and notice of environmental justice impacts that much more critical to alerting these overburdened communities to the impacts of federal actions on their health and environment.¹⁵⁰ By not providing this analysis, EPA has shifted the burden of collecting and analyzing this information onto these communities and created an additional barrier to their ability to participate meaningfully in this process. Communities cannot provide informed comment when basic information about the impacts of EPA's actions is missing. This omission hampers the fulfillment of the goals of the public comment period as well as attainment of the environmental justice goal of meaningful involvement of all people, which EPA has explained means: "People have an opportunity to participate in decisions about activities that may affect their environment and/or health," "[t]he public's contribution can influence the regulatory agency's decision," "[c]ommunity concerns will be considered in the decision making process," and "[d]ecision makers will seek out and facilitate the involvement of those potentially affected."¹⁵¹

These barriers to participation are exacerbated by the limited window that the agency has provided for public input on this proposal. See Section VIII.

b. The Proposal will disproportionately impact environmental justice communities and children.

¹⁴⁸ OMB, Circular A-4 (Sept. 17, 2003).

¹⁴⁹ EPA, *Technical Guidance for Assessing Environmental Justice in Regulatory Actions* (2016) at 1112, https://www.epa.gov/sites/production/files/2016-06/documents/ejtg_5_6_16_v5.1.pdf.

¹⁵⁰ See, NEJAC, *Model Guidelines for Public Participation* (2013) at 2-4, <https://www.epa.gov/sites/production/files/2015-02/documents/recommendations-model-guide-pp-2013.pdf>.

¹⁵¹ EPA, *Learn About Environmental Justice*, <https://www.epa.gov/environmentaljustice/learn-about-environmental-justice>.

Significant evidence suggests that the Proposed Rule raises serious environmental justice concerns that demand attention and mitigation. Communities that are overburdened by freight truck traffic, most often environmental justice communities, are the communities who will be most impacted by this rule, which will worsen freight truck pollution in their immediate environments. Low-income communities of color are more likely to be situated near roadways and ports with high flows of heavy-duty diesel freight truck traffic.¹⁵²

In the Phase 2 Standards, EPA noted that “homes with a nonwhite householder were 22–34 percent more likely to be located within 300 feet of these large transportation facilities than homes with white householders,” “[h]omes with a Hispanic householder were 17–33 percent more likely to be located within 300 feet of these large transportation facilities than homes with non-Hispanic householders,” and additionally “[h]ouseholds near large transportation facilities were, on average, lower in income and educational attainment.”¹⁵³

This proposal also seriously impacts school children, with disproportionate adverse impacts to low-income students and students of color. Out of a total of about 50 million students attending K-12 school, 10 million students attend school within 200 meters of a primary or secondary roadway and nearly 1 million students attend school within 200 meters of a primary roadway.¹⁵⁴ EPA has found that “minority students were overrepresented at schools within 200 meters of the largest roadways, and that schools within 200 meters of the largest roadways also had higher than expected numbers of students eligible for free or reduced-price lunches.”¹⁵⁵

EPA concluded in the Phase 2 Standards that “there is substantial evidence that people who live or attend school near major roadways are more likely to be of a minority race, Hispanic ethnicity, and/or low SES [socioeconomic status]. The emission reductions from these final rules will likely result in widespread air quality improvements, but the impact on pollution levels in close proximity to roadways will be most direct. Thus, these final rules will likely help in mitigating the disparity in racial, ethnic, and economically based exposures.”¹⁵⁶ This language supports the notion that the proposal to repeal the requirements for glider vehicles will contribute to the disparities that the Phase 2 Standards would have alleviated, if left intact.

Low-income communities and communities of color sited near roadways and ports are thus disproportionately exposed to harmful diesel pollutants for which this proposal will undo protections. People who live, work, or attend school near high-traffic roadways are more

¹⁵² EPA, *Draft Environmental Justice Primer for Ports* (2016) at 7, <https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100OYGB.pdf>; EPA, *National Air Toxics Program: The Second Integrated Urban Air Toxics Report to Congress* (2014) at 2-8, 2-9 (“Over twenty million U.S. homes are near large roads, railroads and airports. . . . Populations in close proximity to major roads are higher in minority and low-income composition.”)

¹⁵³ HDP2 Rule, 81 Fed. Reg. at 73,847.

¹⁵⁴ EPA, “Schools Near Roads Analysis for the Tier 3 NPRM Docket,” Docket ID No. EPA-HQ-OAR-2011-0135-0488; see also Alexandra S. Appatova et al., *Proximal exposure of public schools and students to major roadways: a nationwide US survey*, *J. Env'tl. Plan. & Mgmt.*, 51 (5), 2008, p.631.

¹⁵⁵ HDP2 Rule, 81 Fed. Reg. at 73,847.

¹⁵⁶ *Id.*

susceptible to adverse health effects than people who do not spend significant amounts of time around major roads.¹⁵⁷ According to EPA’s Urban Air Toxics Report to Congress, “concentrations of benzene, aldehydes, PM and many other compounds are elevated in ambient air within approximately 300-600 meters (about 1,000-2,000 feet) of major roadways” due to motor vehicle emissions.¹⁵⁸ The health impacts from air pollution in port communities include “(1) aggravation of respiratory and cardiovascular disease; (2) decreased lung function; (3) increased frequency and severity of respiratory symptoms such as difficulty breathing and chronic coughing; (4) increased susceptibility to respiratory infections; (5) effects on the nervous system, including the brain, such as IQ loss and impacts on learning, memory and behavior; (6) cancer; and (7) premature death.”¹⁵⁹

Exposure to pollution from heavy-duty vehicles has been linked by numerous studies to respiratory conditions¹⁶⁰, heart attacks¹⁶¹, cancer¹⁶², adverse pregnancy and birth outcomes¹⁶³, premature mortality¹⁶⁴, and reduced cognitive function¹⁶⁵. One study found “significant evidence of adverse effects related to exposure to PM_{2.5} and ozone at concentrations below current

¹⁵⁷ Control of Air Pollution From Motor Vehicles: Tier 3 Motor Vehicle Emission and Fuel Standards; Proposed Rule, 78 Fed. Reg. 29,816, 29,837 (May 21, 2013).

¹⁵⁸ EPA, *National Air Toxics Program: The Second Integrated Urban Air Toxics Report to Congress* (2014) at 2-8, 2-9.

¹⁵⁹ EPA, *Draft Environmental Justice Primer for Ports* (2016) at 6, <https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100OYGB.pdf>.

¹⁶⁰ Gauderman, W.J., Vora, H., McConnell, R., Berhane, K., Gilliland, F., Thomas, D., Lurmann, F., Avol, E., Kunzli, N. & M. Jerrett, et al. (2007). Effect of exposure to traffic on lung development from 10 to 18 years of age: a cohort study. *Lancet*, 369, 571-577; McConnell, R., Berhane, K., Yao, L., Jerrett, M., Lurmann, F., Gilliland, F., Kunzli, N., Gauderman, J., Avol, E., Thomas, D., & Peters, J. (2006). Traffic, susceptibility, and childhood asthma. *Environmental Health Perspectives*, 766-772; McConnell, R., Islam, T., Shankardass, K., Jerrett, M., Lurmann, F., Gilliland, F., Gauderman, J., Avol, E., Kunzli, N., Yao, L., Peters, J. & Berhane, K. (2010). Childhood incident asthma and traffic-related air pollution at home and school. *Environmental Health Perspectives*, 118, 1021-1026.

¹⁶¹ Peters, A., von Klot, S., Mittleman, M.A., Meisinger, C., Hormann, A., Kuch, B. & Wichmann, H.E. (2013). Triggering of acute myocardial infarction by different means of transportation. *European Journal of Preventive Cardiology*, 20, 750-758.

¹⁶² Vermeulen R, Silverman DT, Garshick E, Vlaanderen J, Portengen L, Steenland K. 2014. Exposure-response estimates for diesel engine exhaust and lung cancer mortality based on data from three occupational cohorts. *Environ Health Perspect* 122:172–177; <http://dx.doi.org/10.1289/ehp.1306880>; World Health Organization, International Agency for Research on Cancer (IARC). (2012). Diesel engine exhaust carcinogenic. Retrieved from https://www.iarc.fr/en/media-centre/pr/2012/pdfs/pr213_E.pdf.

¹⁶³ Wu, J., Ren, C., Delfino, R.J., Chung, J., Wilhelm, M. & Ritz, B. (2009). Association between local traffic-generated air pollution and preeclampsia and preterm delivery in the South Coast air basin of California. *Environmental Health Perspectives*, 117, 1773-1779; Green, R.S., Malig, B., Windham, G., Fenster, L., Ostro, B. & Swan, S. (2009). Residential exposure to traffic and spontaneous abortion. *Environmental Health Perspectives*, 117, 1939-1944.

¹⁶⁴ Fann, N., Fulcher, C.M., & Baker, K. (2013). The recent and future health burden of air pollution apportioned across U.S. sectors. *Environmental Science & Technology*, 47(8), 3580-3589; Chambliss, S.E., Silva, R., West, J.J., Zeinali, M., & Minjares, R. (2014). Estimating source-attributable health impacts of ambient fine particulate matter exposure: global premature mortality from surface transportation in 2005. *Environmental Research Letters*, 9, 1-10; Vermeulen R, Silverman DT, Garshick E, Vlaanderen J, Portengen L, Steenland K. 2014. Exposure-response estimates for diesel engine exhaust and lung cancer mortality based on data from three occupational cohorts. *Environ Health Perspect* 122:172–177; <http://dx.doi.org/10.1289/ehp.1306880>.

¹⁶⁵ Ranft, U., Schikowski, T., Sugiri, D., Krutmann, J. and U. Kramer. 2009. Long-term exposure to traffic-related particulate matter impairs cognitive function in the elderly. *Environ. Res.* 109: 1004-1011.

national standards,” an effect “most pronounced among self-identified racial minorities and people with low income.”¹⁶⁶ The modern pollution controls that this proposal repeals make a real difference to health outcomes—with one study finding that “emissions from 2007- and 2010-compliant HHDDE [Heavy Heavy-Duty Diesel Vehicles] have been reduced dramatically and that exhaust from a 2007-compliant engine produced no tumors or precancerous effects in rats exposed over their lifetime.”¹⁶⁷

Not only are low-income populations and populations of color more exposed to these toxic air pollutants, but these exposures pose greater health risks to them as well. With regard to particulate matter, for example, low-income populations “have been generally found to have a higher prevalence of pre-existing diseases, limited access to medical treatment, and increased nutritional deficiencies, which can increase their risk of particle pollution-related effects.”¹⁶⁸ The impact of these cumulative risks must be taken into account to fully appreciate the impact of this proposal on environmental justice communities.

Take for instance, just two environmental justice communities that are burdened by freight truck pollution, for which the Proposed Repeal would have significant adverse health impacts:

South Bronx, New York

The South Bronx experiences significant amounts of freight truck traffic from multiple expressways cutting through the area, more than a dozen waste transfer stations, a sewage-treatment plant, and as the site of the Hunts Point Food Market, which supplies 60% of New York City’s food. According to a study conducted by the City of New York, the South Bronx neighborhood of Hunts Point has 15,000 freight trucks entering and exiting the peninsula on a daily basis.¹⁶⁹ These freight trucks often utilize routes going through residential areas of the community to connect from the Food Market to the highway.¹⁷⁰ A study by New York University researchers found that children in the South Bronx were twice as likely to attend school near a major highway as children in other parts of the city.¹⁷¹ This community comprises an environmental justice community—43% of Hunts Point and Longwood residents live below the Federal Poverty Line, and 76% of residents are Hispanic.¹⁷² This community also suffers significant health disparities as a result of the environmental burdens including freight truck

¹⁶⁶ Di et al., 2017, *Air Pollution and Mortality in the Medicare Population*.

¹⁶⁷ Constantini et al. (ACES), 2016, *The Advanced Collaborative Emissions Study (ACES) of 2007- and 2010-Emissions Compliant Heavy-Duty Diesel Engines: Characterization of Emissions and Health Effects*.

¹⁶⁸ EPA, *EJ 2020 Action Agenda* (2016) at 51, https://www.epa.gov/sites/production/files/2016-05/documents/052216_ej_2020_strategic_plan_final_0.pdf; see also HDP2 Rule, 81 Fed. Reg. at 73,846 (“several studies find stronger associations between air pollution and health in locations with . . . chronic neighborhood stress, suggesting that [low socioeconomic] populations in these areas may be more susceptible to the effects of air pollution”).

¹⁶⁹ City of New York Hunts Point Task Force, *Hunts Point Vision Plan* at 20, https://www.nycedc.com/sites/default/files/filemanager/Projects/Hunts_Point_Vision_Plan/HPVisionPlan_Improve_mentTraffic.PDF.

¹⁷⁰ Id.

¹⁷¹ Manny Fernandez, *A Study Links Trucks’ Exhaust to Bronx Schoolchildren’s Asthma*, N.Y. Times (Oct. 29, 2006), <http://www.nytimes.com/2006/10/29/nyregion/29asthma.html>.

¹⁷² NYC Health, *Bronx Community District 2: Hunts Point and Longwood* (2015), <https://www1.nyc.gov/assets/doh/downloads/pdf/data/2015chp-bx2.pdf>.

pollution—the rate of hospitalization for asthma for adults and children in this area is more than twice the New York City-wide rate.¹⁷³

West Oakland, California

The Port of Oakland on the San Francisco Bay serves as a major container ship facility, and brings in heavy amounts of freight truck traffic to the surrounding communities. A study of West Oakland, which lies adjacent to the Port of Oakland, found that 7,200 freight trucks travel down West Oakland streets daily from 7:00am to 6:00pm.¹⁷⁴ A study of air quality in the area found that the West Oakland community experiences rates of diesel PM ambient concentrations three times those of the Bay Area generally.¹⁷⁵ According to U.S. Census data for the zip code comprising West Oakland, 73% of residents are of color¹⁷⁶ and 30% of residents live below the Federal Poverty Line.¹⁷⁷

IV. The Proposed Rule will impact other clean air programs, including states' ability to comply with the National Ambient Air Quality Standards

EPA asserts that the proposal, if finalized, will “not affect the level of public health and environmental protection already being provided” by other Clean Air Act mechanisms, including National Ambient Air Quality Standards (NAAQSs), or local and state air quality programs.¹⁷⁸ This argument is not supported by any reasoning or analysis in the record, and is clearly incorrect.

The Clean Air Act lays out a carefully structured mechanism for addressing harmful air pollution. EPA has a duty to address harmful emissions from heavy duty freight trucks. Meanwhile, state officials are responsible for ensuring achievement of the NAAQS air quality standards.

EPA's proposed action is antithetical to the goals of attaining and maintaining the national ambient air quality standards because it would allow unlimited, uncontrolled numbers of heavy duty vehicles emitting NO_x and PM at rates as much as 40 to 450 times higher than modern engines. In the 2016 phase 2 rule for heavy-duty vehicles, EPA analyzed the effects of closing the gliders loophole and estimated that these provisions are associated with annual reductions of 6,800 tons of PM and 415,000 tons of NO_x.¹⁷⁹ New analysis of the pollution impacts from glider

¹⁷³ *Id.* at 12.

¹⁷⁴ Bay Area Air Quality Management District, West Oakland Truck Survey (2009) at ES-2, <http://www.baaqmd.gov/~media/files/planning-and-research/care-program/final-west-oakland-truck-survey-report-dec-2009.pdf>.

¹⁷⁵ *Id.* at 2.

¹⁷⁶ U.S. Census Bureau, Selected Social Characteristics in the United States, 2012-2016 American Community Survey 5-Year Estimates data for ZCTA5 94607.

¹⁷⁷ U.S. Census Bureau, Selected Economic Characteristics, 2012-2016 American Community Survey 5-Year Estimates data for ZCTA5 94607.

¹⁷⁸ 82 Fed. Reg. at 53,448.

¹⁷⁹ HDP2 Response to Comments at 1880.

vehicles,¹⁸⁰ as well as indications that glider sales may be even higher than EPA assumed,¹⁸¹ indicate that these enormous quantities may be significant underestimates.

These additional emissions will upset states’ ability to meet and maintain NAAQS compliance and jeopardize healthy air quality. As various States and Air Quality Districts stated at the public hearing, States factored in the reduction of glider vehicle emissions into their NOx and PM budgets; the Proposed Rule, if enacted, would harm efforts to attain or maintain the ozone and PM NAAQS.¹⁸² For example, one California official testified that if gliders were to make up only 7% of California’s trucking fleet, meeting the State’s SIP obligation’s would be “impossible.”¹⁸³ Another organization estimated that, by 2040, “excess NOx emissions from [gliders] . . . could rival the entire 2018 NOx budget for fossil fuel power plants in 22 states covered by the Cross-State Air Pollution Rule Update.”¹⁸⁴

Table XX provides a comparison between the emissions reduced by the Phase 2 glider provisions and EPA’s Tier 3 motor vehicles emissions standards, as well as an approximation of the cost of compliance per ton to reduce NOx emissions from glider vehicles with the cost per ton to reduce these emissions under EPA’s Tier 3 standards.

Table XX. Comparison - Phase 2 Glider Provisions and Tier 3 Motor Vehicle Emission Standards

	NO_x EMISSIONS REDUCTIONS [TPY]	PM_{2.5} EMISSIONS REDUCTIONS [TPY]	ESTIMATED COSTS [\$ PER TON]
FLEETWIDE GLIDER VEHICLE EMISSIONS ABOVE CONTROL LEVELS	190,231 TONS IN 2025 ¹	5,064 TONS IN 2025 ¹	\$1,621/TON NO _x + NMHC (1999\$) ²
	318,615 TONS IN 2040 ¹	8,546 TONS IN 2040 ¹	

¹⁸⁰ See Section I.

¹⁸¹ See Section I. i.

¹⁸² Testimony of Miles Keogh on behalf of the National Association of Clean Air Agencies, Docket ID No. EPA-HQ-OAR-2014-0827-4293 (Dec. 4, 2017) *available at* http://www.4cleanair.org/sites/default/files/Documents/NACAA_Testimony-EPA_Gliders_NPRM-010417.pdf; *see also* Testimony of Paul Farrell on behalf of Connecticut Department of Environmental Protection, Docket ID No. EPA-HQ-OAR-2014-0827-4287 (Dec. 4, 2017) (“allowing this repeal will frustrate Connecticut’s ability to meet federal air quality standards”) *available at* <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-4287>; *and* Testimony of Wayne Nastri on behalf of the South Coast Air Quality Management District, Docket ID No. EPA-HQ-OAR-2014-0827-4305 (Dec. 4, 2017), *available at* <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-4305> (“repealing the Phase 2 rule for gliders will significantly hamper our ability to clean up the air and attain national ambient air quality standards”).

¹⁸³ Testimony of Steve Cliff on behalf of the California Air Resources Board, Docket ID No. EPA-HQ-OAR-2014-0827-4282 (Dec. 4, 2017) *available at* <https://ww2.arb.ca.gov/testimony-opposing-epas-proposed-repeal-emission-requirements-glider-vehicles-glider-engines-and>.

¹⁸⁴ Testimony of Matt Solomon on behalf of the Northeast States for Coordinated Air Use Management, Docket ID No. EPA-HQ-OAR-2014-0827-4319 (Dec. 4, 2017) *available at* <http://www.nescaum.org/items-of-interest>.

**EPA TIER 3 MOTOR VEHICLE
EMISSION AND FUEL
STANDARDS**

264,369 TONS IN 2018 ³	130 TONS IN 2018 ³	\$5,349/TON NO _x IN 2018 (2011\$) ⁴
328,509 TONS IN 2030 ³	7,892 TONS IN 2030 ³	\$4,435/TON NO _x IN 2030 (2011\$) ⁴

TABLE NOTES:

¹ EPA Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles - Phase 2 Response to Comments for Joint Rulemaking, Aug 2016, Appendix A, p. 1962

² Long-term discounted lifetime cost effectiveness per ton for Heavy-HDV engine control technology for MY2007+. *See* 66 Fed. Reg. 5102 January 18, 2001 Table V.E-1 and EPA RIA: Heavy-Duty Engine and Vehicle Standards and Highway Diesel Fuel Sulfur Control Requirements, December 2000, p. VI-17.

³ EPA Control of Air Pollution from Motor Vehicles: Tier 3 Motor Vehicle Emission and Fuel Standards Final Rule RIA, EPA-420-R-14-005, March 2014, p. ES-7

⁴ EPA Control of Air Pollution from Motor Vehicles: Tier 3 Motor Vehicle Emission and Fuel Standards Final Rule RIA, March 2014, p. 8-4

The agency’s suggestion that the proposal will not jeopardize children’s health because the NAAQS still apply,¹⁸⁵ fails to consider that unrestricted glider vehicle emissions will seriously undermine the ability of States to attain and maintain the NAAQS; moreover, EPA has no basis for such a conclusion because it not analyzed or evaluated this impact. It also fails to reflect that there are no NAAQS for the toxic air pollutants that comprise diesel exhaust, or for diesel exhaust itself—and thus the NAAQS are inherently incapable of protecting against the full slate of health risks posed by diesel emissions.¹⁸⁶

In any case, Title 2 stands as evidence that Congress did not regard the NAAQS as an excuse not to curb dangerous vehicular emissions, but saw control of motor vehicle pollution as a critical element of an overall program to address harmful air pollution.¹⁸⁷

State air quality officials will face additional pollution from EPA’s Proposed Rule that will make it more challenging for states to meet health-based ozone and PM standards, and more costly. EPA has failed to consider many important issues associated with NAAQS compliance, much less address them in a meaningful way, rendering the proposal both substantively and procedurally unlawful.¹⁸⁸

¹⁸⁵ Proposed Rule, 82 Fed. Reg. at 53,448.

¹⁸⁶ *See supra* Section III.

¹⁸⁷ *See, e.g.*, S. Rep. No. 192 at 3 (“The committee believes that this legislation is essential if we are to successfully combat the air pollution problems present at this time and those which inevitably occur unless early corrective action is taken. Automotive exhausts are not the only source of air pollution, but they are a major problem and they are increasing rapidly.”).

¹⁸⁸ *See* Sections V and VII.

V. EPA has Clear Legal Authority under the CAA to Regulate Glider Vehicles.

EPA’s proposal rests entirely on the deeply mistaken legal argument that glider vehicles are not “new motor vehicles” under the Act, and that therefore EPA lacks authority to address their disproportionate, enormous levels of air pollution emissions. In fact, EPA has clear independent legal authority to regulate glider vehicles, both under section 202(a)(1) of the CAA, which tasks EPA with setting emission standards for new motor vehicles, and under section 202(a)(3)(D) of the Act, which authorizes EPA to regulate rebuilt heavy-duty engines. EPA relied on both of these authorities in promulgating the glider vehicle provisions of the Phase 2 Standards. In proposing to repeal the glider vehicle provisions, EPA has put forth an untenable interpretation of its authority under section 202(a)(1) and has wholly failed to address its authorities under section 202(a)(3)(D). The Proposed Rule’s assessment of its statutory authorities abandons reasoned statutory construction and ignores the health-protective purpose of the CAA.

a. EPA Clearly Has Authority to Regulate Glider Vehicles as New Motor Vehicles.

The Proposed Rule, despite obviously significant public health and environmental impacts, is grounded not on an analysis of glider vehicle emissions, but instead is based solely on a new legal interpretation of the statute concluding that glider vehicles are not “new motor vehicles” for purposes of Section 202(a)(1) of the CAA and that therefore EPA is without authority to control pollutant emissions from the vehicles or their engines. The argument to reinterpret the Act to say that glider vehicles are not new motor vehicles is devoid of legal merit. The interpretation is at odds with the clear statutory language; it is based on a palpable end-run around the standard tenets of statutory construction; it is impermissibly and diametrically at odds with statutory goals and purposes; and it leads to adverse and absurd results.

i. Glider Vehicles are “New Motor Vehicles” under the Unambiguous Terms of the Statute

The only reasonable interpretation of Section 202(a)(1) of the CAA is that glider vehicles are “new” motor vehicles. EPA therefore unquestionably has both the authority and the responsibility to regulate them. Section 202(a)(1) mandates that EPA:

by regulation prescribe (and from time to time revise) in accordance with the provisions of this section, standards applicable to the emission of any air pollutant from any class or classes of new motor vehicles or new motor vehicle engines, which in his judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare.¹⁸⁹

Section 216(3) of the Act defines “new motor vehicle” as “a motor vehicle the equitable or legal title to which has never been transferred to an ultimate purchaser.”¹⁹⁰ A glider vehicle clearly meets this definition, as EPA concluded in the Phase 2 Standards: it is a motor vehicle; the purchaser takes initial title; glider vehicles are explicitly advertised as “brand new” trucks,

¹⁸⁹ 42 U.S.C. § 7521.(a)(1).

¹⁹⁰ 42 U.S.C. § 7550.(3).

together with complementary features like warranties.¹⁹¹ In the Proposed Rule, the agency offers no substantiation to rebut any of the agency’s prior factual findings and accordingly fails to justify its new interpretation.¹⁹²

Section 216(3) also defines “new motor vehicle engine” as “*an engine in a new motor vehicle or a motor vehicle engine the equitable or legal title to which has never been transferred to the ultimate purchaser.*”¹⁹³ The definition is clear that a new motor vehicle may include a used engine.¹⁹⁴ Section 216(3) also makes clear that the definitions of “new motor vehicle” and “new motor vehicle engine” cover all imported vehicles and engines without distinguishing between new and used vehicles, and accordingly clearly includes used vehicles. On its face the definition of new motor vehicle is consequently not limited to vehicles that have only new components and no used components.

This straightforward application of the definitions of new motor vehicle and new motor vehicle engine to glider vehicles and glider vehicle engines is the only correct interpretation. Nothing in Section 216(3)’s criterion regarding passage of title to the ultimate consumer makes any reference to whether the components of the vehicle are new or used. The criterion is simply passage of title, with no other limitation on the history of the components prior to passage of title. Where no ultimate consumer has ever had title to the vehicle—as is the case for glider vehicles—the vehicle is a “new motor vehicle” under the clear terms of the Clean Air Act. In its Proposed Rule, EPA itself admits that the plain language of the statute supports regulation of gliders as new vehicles.¹⁹⁵

This interpretation accords with commercial reality. Glider vehicles are marketed as “brand new trucks.” Comparable warranties and prices are offered for glider vehicles. They are titled as new vehicles, and come with new vehicle ID numbers. They are advertised under the name of the kit builder — and so bear the new truck name. See section 1(h) above.

Moreover, this interpretation of section 202(a)(1)’s application to glider vehicles clearly promotes the purposes of the Clean Air Act and its Title 2 provisions. The Clean Air Act’s purpose is the “reduction or elimination” of pollutants at the source.¹⁹⁶ Under Title 2, Congress authorized EPA to establish a national motor vehicle control program to protect the public from the serious and widespread problems of motor vehicle air pollution. Congress recognized motor vehicles as major contributors to the Nation’s air pollution problems,¹⁹⁷ and provided broad, flexible, and comprehensive authorities to EPA to develop a national program to address air

¹⁹¹ HDP2 Rule, 81 Fed. Reg. at 73,514 and n.83; *see also* Section 1(h).

¹⁹² *Cf. FCC v. Fox Television Stations, Inc.*, 556 U.S. 502, 515 (2009) (When an agency’s “new policy rests upon factual findings that contradict those which underlay its prior policy,” the agency must “provide a more detailed justification than what would suffice for a new policy created on a blank slate.”).

¹⁹³ 42 U.S.C. § 7550(3) (emphasis added).

¹⁹⁴ EPA’s current arguments to the contrary, articulated in the 2017 Proposed Rule, are without merit as discussed below in Section V.b.

¹⁹⁵ 82 Fed. Reg. at 53,445 (“Focusing solely on . . . the statutory definition . . . a glider vehicle would appear to qualify as ‘new.’”).

¹⁹⁶ 42 U.S.C. § 7401(a)(3).

¹⁹⁷ 42 U.S.C. § 7401(a)(2).

pollution from vehicles. Section 202(a)(1) mandates that the EPA Administrator “shall” promulgate standards applicable to the emission of “any air pollutant” from new motor vehicles and engines, which “cause, or contribute to” air pollution which “may reasonably be anticipated to endanger public health or welfare.”¹⁹⁸ The text of the definition of new motor vehicle reflects the broad scope of vehicles subject to EPA standard setting, and the standard setting provisions of section 202 reflect the flexibility provided to EPA to develop appropriate solutions to this diverse and multi-faceted source of air pollution. EPA’s 2016 Phase 2 Standards recognizes the very serious air pollution problem specifically attributable to glider vehicles and applies the definition of new motor vehicle in direct accord with the text of the definition, mandating EPA to address this dangerous pollution source. In contrast, the Proposed Rule fails to acknowledge or consider the purposes of the Clean Air Act, or to discuss how the Proposed Rule would further those purposes.

In the 2016 Phase 2 Standards, EPA properly interpreted the statutory language to mean exactly what it says, finding that glider vehicles are new motor vehicles subject to standards under section 202(a)(1) of the Act.¹⁹⁹ The statutory interpretation contained in the Phase 2 Standards reflects the only reasonable interpretation, and is consistent with Congress’ clear intention and furthers the purposes of the Act. Therefore, EPA has a duty to establish pollution control limits for glider vehicles under section 202(a)(1) of the Act.

b. The Proposed Rule’s new interpretation of section 202(a)(1) is unreasonable and impermissible.

Even if the statutory text did not completely resolve the issue, EPA’s proposed interpretation is unreasonable and impermissible. The interpretation flies in the face of clear statutory text, structure, and purpose; attempts to manufacture ambiguity where there is none; and is unlawful.

EPA’s new interpretation of the statutory text—that glider kits do not qualify as “new motor vehicles”—is fundamentally at odds with the clear text of pertinent provisions and with the purpose of the statute as well as the Clean Air Act’s purposes and structure. While disregarding the statute’s purpose and structure, EPA relies on unfounded and illogical statutory interpretation arguments, attempting to justify the Proposed Rule with two theories: (1) Congress, in defining “new motor vehicle” for purposes of Title 2 did not have “a specific intent to include within the statutory definition such a thing as a glider vehicle”;²⁰⁰ and (2) in adopting a definition of “new motor vehicle” for purposes of the Clean Air Act, Congress drew on the approach it had taken with the Automobile Information Disclosure Act of 1958 (“AIDA”), suggesting Congress intended, for purposes of Title 2, that “new motor vehicle” would mean only a “showroom new”

¹⁹⁸ 42 U.S.C. § 7521(a)(1); *see also Coal. for Responsible Regulation, Inc. v. Env’tl. Prot. Agency*, 684 F.3d 102, 126 (D.C. Cir. 2012) (“If EPA makes a finding of endangerment, the Clean Air Act requires the [a]gency to regulate emissions of the deleterious pollutant from new motor vehicles.” (quoting *Mass. v. Env’tl. Prot. Agency*, 549 U.S. 497, 533 (2007))).

¹⁹⁹ *See, e.g., Council for Urological Interests v. Burwell*, 790 F.3d 212, 219 (D.C. Cir. 2015) (2015) (“We begin, as always, with the plain language of the statute in question.”); *NRDC v. Browner*, 57 F.3d 1121, 1127 (D.C. Cir. 1995) (“Where the terms of a statute are unambiguous, further judicial inquiry into the intent of the drafters is generally unnecessary.”).

²⁰⁰ Proposed Rule, 82 Fed. Reg. at 53,445.

vehicle.²⁰¹ These notions are unsubstantiated and fail to rationalize EPA’s interpretation of Section 202(a)(1) to exclude glider vehicles.

- i. EPA’s new interpretation is at odds with the statutory definition of “new motor vehicle”

The Proposed Rule concludes that the phrase “new motor vehicle” as applied under section 202(a)(1) does not include glider vehicles because it contains an engine and power train that are previously owned, and that a glider engine is not a “new motor vehicle engine” because it is installed in a glider kit to form the glider vehicle, which is not a “new motor vehicle.”²⁰² But this interpretation is not reasonable. This logic merely reiterates the agency’s *a priori* belief that a glider vehicle cannot be new, and suffers from the very circular thinking it accuses the prior administration of adopting in promulgating the Phase 2 Standards’ glider provisions.

The definition of “new motor vehicle engine” is clear under the terms of Section 216(3): a new motor vehicle engine can be an engine whose title has already been transferred to the ultimate purchaser.²⁰³ The proposal indeed concedes this very point — as it must—affirming that “[p]rior to the time a completed glider vehicle is sold, it can be said that the vehicle’s ‘equitable or legal title’ has yet to be ‘transferred to an ultimate purchaser.’”²⁰⁴

The agency nonetheless asserts that since a glider vehicle cannot be a “new motor vehicle”, a used engine installed in it cannot make a used engine a new one, dismissing the contrary position as “circular thinking”.²⁰⁵

EPA’s position is unreasonable for the additional reason that, if the Proposed Rule’s interpretation that a vehicle with a previously used engine cannot be a new motor vehicle were correct, it would render part of the statutory definition of “new motor vehicle engine” superfluous—contrary to canons of statutory construction.²⁰⁶ The Proposed Rule’s interpretation is premised in part on the claim that a vehicle with a previously used engine cannot be a new motor vehicle.²⁰⁷ The statute defines a “new motor vehicle engine” as “an engine in a new motor vehicle or a motor vehicle engine the equitable or legal title to which has never been transferred to the ultimate purchaser.”²⁰⁸ But EPA proposes to interpret the statute to mean that a vehicle with a used engine cannot be a “new motor vehicle.” If that were so, then the first prong in the

²⁰¹ Proposed Rule, 82 Fed. Reg. at 53,446.

²⁰² *Id.*

²⁰³ See 42 U.S.C. § 7550(3) and HDP2 Rule, 81 Fed. Reg. at 73,514, 73,518.

²⁰⁴ Proposed Rule, 82 Fed. Reg. at 53,444.

²⁰⁵ *Id.* at 53,446.

²⁰⁶ See, e.g., *TRW Inc. v. Andrews*, 534 U.S. 19, 31 (2001) (refusing to adopt interpretation of a statute that would render some statutory text “insignificant, if not wholly superfluous”); (quotation marks omitted); see also *Board of Trustees of Leland Stanford Junior Univ. v. Roche Molecular Systems, Inc.*, 563 U.S. 776, 787 (2011); *Duncan v. Walker*, 533 U.S. 167, 174 (2001); *Bailey v. United States*, 516 U.S. 137, 146 (1995) (“We assume that Congress used two terms because it intended each term to have a particular, nonsuperfluous meaning.”).

²⁰⁷ See 82 Fed. Reg. at 53,446 (“Based on that structure and history, it seems likely that Congress understood a ‘new motor vehicle,’ as defined in CAA § 216(3), to be a vehicle comprised entirely of new parts *and certainly not a vehicle with a used engine.*”).

²⁰⁸ 42 U.S.C. § 7550(3).

disjunctive definition of “new motor vehicle engine” would be superfluous. If *every* “new motor vehicle” must have a “never-titled-new” engine, then every engine qualifying as new under the first prong of section 216(3) would likewise qualify as new under the second prong, rendering the first prong superfluous. This reading is unreasonable and impermissible. The phrase “an engine in a new motor vehicle,” and its juxtaposition with the phrase, “equitable and legal title [to engine] has not passed,” make clear that Congress understood some new motor vehicles that would have engines that would not independently meet the “equitable or legal title never passed” definition. And these textual features indicate that EPA now badly misunderstands the statute when it proposes to describe a “never-titled-new engine” as a *sine qua non* of a new motor vehicle.

To dismiss the first prong of the definition of new motor vehicle engine, “an engine in a new motor vehicle,” EPA relies, *ipse dixit*, on its own assertion that glider vehicles are not new.²⁰⁹ In other words, EPA has decided that a glider vehicle engine cannot be a “new motor vehicle engine” because it is not in a new motor vehicle, and that the motor vehicle it is in is not a new motor vehicle only because the motor vehicle has a used engine in it. It is the proposal’s analysis which is circular.

ii. EPA’s Proposed New Interpretation is Impermissibly at Odds with the Statutory Purpose and Structure

This proposal not only fails to take into consideration the statutory text and commercial reality, it also fails to reflect – and severely undermines – Congress’s core purpose in Clean Air Act Section 202 to reduce emissions of air pollution that endanger public health and welfare.²¹⁰ First, EPA’s construction exempts extremely high-emitting vehicles whose emissions would seriously harm public health. See Section I. Second, by providing a competitive advantage for high-emitting vehicles, EPA’s construction would seriously undermine the efficacy of pollution standards for other new freight trucks. See Section XI. The fact that EPA has not examined the harms its interpretation would cause to public health, and to the overall integrity of an entire vital statutory pollution control regime, means that EPA has acted arbitrarily and capriciously under 42 U.S.C. 7607(d)(9)(A) and *State Farm* and progeny; but the fact that EPA has not explained, and cannot rationally explain, how its circular interpretation makes sense given the serious

²⁰⁹ Need cite to Proposed Rule

²¹⁰ See *UC Health v. NLRB*, 803 F.3d 669, 675 (D.C. Cir. 2015) (holding that an agency construction must be “reasonable and consistent with the statute’s purpose”); *Coal Employment Project v. Dole*, 889 F.2d 1127, 1131 (D.C. Cir. 1989) (stating that to be reasonable, an interpretation must be “consistent with the statutory purpose”); *Abbott Laboratories v. Young*, 920 F.2d 984, 988 (D.C. Cir. 1990) (“The ‘reasonableness’ of an agency’s construction depends on the construction’s ‘fit’ with the statutory language as well as its conformity to statutory purposes.”); *Cont’l Air Lines, Inc. v. DOT*, 843 F.2d 1444, 1449 (D.C. Cir. 1988) (explaining that *Chevron* step two is determined “by reference both to the agency’s textual analysis (broadly defined, including where appropriate resort to legislative history) and to the compatibility of that interpretation with the Congressional purposes informing the measure”); *Bozwich v. Mathews*, 558 F.2d 475, 480 (8th Cir. 1977) (rejecting as unreasonable an agency’s reading of statute because it “conflicts with the clear legislative purpose”); see also *United States v. Gordon*, 875 F.3d 26, 35–36 (1st Cir. 2017) (rejecting interpretation that “conflicts with the clear congressional purpose animating th[e] statute”).

damage it would cause to core statutory objectives and mechanics renders the interpretation impermissible as an exercise in statutory construction as well.²¹¹

The Proposed Rule maintains that the interpretation is “permissible” since “[a]t a minimum, ambiguity exists” in the statute.²¹² As explained above, there is no ambiguity with respect to the relevant question and the statute plainly contemplates that new motor vehicles can include used components, including non-new engines. But even assuming that this statutory language in isolation does not compel EPA’s reading in the 2016 Phase 2 Standards, the Proposed Rule fails to justify that the reinterpretation is “permissible” in terms of the statute’s structure or purposes.

Title 2 of the Act creates a mandate to control dangerous vehicular emissions, with special emphasis on controlling emissions from heavy duty diesel engines. It provides a dual “engine” definition which makes clear that a new motor vehicle can include an old engine. It provides authority over rebuilt heavy duty diesel engines.²¹³ It provides that only new motor vehicles and engines certified to EPA standards can be introduced into commerce, and provides severe penalties for tampering with air pollution controls. Into this comprehensive design, intending a seamless protective program, EPA now proposes to open up a major loophole.

A reasonable interpretation must be consistent with the statutory purposes of the provision and the statute being interpreted.²¹⁴ Yet EPA makes no attempt to even consider much less justify its proposed interpretation in terms of furthering the purposes of the Act and Title 2. Most glaringly, EPA fails to consider or explain how a congressional purpose of protecting the public health and welfare is promoted by exempting these ultra-high-polluting vehicles from live-saving pollution safeguards.²¹⁵

“[R]easonable statutory interpretation must account for both the specific context in which language is used and the broader context of the statute as a whole.”²¹⁶ “Thus, an agency interpretation that is inconsistent with the design and structure of the statute as a whole does not merit deference.”²¹⁷ The fact that Congress in Section 202 targeted pollution that endangers

²¹¹ “Whether a statute is unreasonably interpreted is close analytically to the issue whether an agency’s actions under a statute are unreasonable.” *Gen. Instrument Corp. v. Fed. Commc’ns*, 213 F.3d 724, 732 (D.C. Cir. 2000); *see also Am. Fed’n of Gov’t Employees v. Nicholson*, 475 F.3d 341, 345–46 (D.C. Cir. 2007) (explaining that the Court’s inquiry under the second step of *Chevron* “overlaps with [the Court’s] inquiry under the arbitrary and capricious standard”).

²¹² Proposed Rule, 82 Fed. Reg. at 53,446.

²¹³ *See infra* Section V(c).

²¹⁴ *See, e.g. Council for Urological Interests*, 790 F.3d 212, 222 (D.C. Cir. 2015) (stating that an interpretation is permissible under *Chevron* step 2 if “it is a reasonable explanation of how an interpretation serves the statute’s objectives”); *Northpoint Tech Ltd. v. FCC*, 412 F.3d 145, 151 (D.C. Cir. 2005).

²¹⁵ *Northpoint Tech., Ltd. v. FCC*, 412 F.3d 145, 151 (“A ‘reasonable’ explanation of how an agency’s interpretation serves the statute’s objectives is the stuff of which a ‘permissible’ construction is made; an explanation that is ‘arbitrary, capricious, or manifestly contrary to the statute,’ however, is not.” (citing *Chevron*, 467 U.S. at 844, 863); *see also Humane Society of U.S. v. Zinke*, 868865 F.3d 585, 595 (D.C. Cir. 2017) (“Accordingly, this court must determine whether the [agency] ‘has advanced a reasonable explanation for its conclusion that the regulations serve . . . [the Act’s] objectives,’ *Chevron*, 467 U.S. at 863, and whether that ‘interpretation . . . is at least reasonable in light of any ambiguities in the statute’..”).

²¹⁶ *Utility Air Regulatory Grp. v. EPA*, 134 S. Ct. 2427, 2442 (2014).

²¹⁷ *Id.*

public health and welfare; employed a broad definition of “new motor vehicles,” and also provided for regulation of emissions from rebuilt engines, shows that Congress did not intend EPA to create such a health-damaging, market-skewing regulatory loophole.²¹⁸ EPA’s proposed interpretation is flatly inconsistent with the statutes “design and structure” and is unreasonable.

- iii. EPA’s proposed interpretation of section 202(a)(1) would have drastic, adverse consequences for the whole mobile source program, a consequence that EPA has not examined

Further, EPA’s proposal ignores the broader adverse consequences of its proposed reinterpretation. If a “new motor vehicle” is limited to vehicles that consist entirely of new parts, as EPA determines, then simply installing one or more used parts on an otherwise new motor vehicle would allow manufacturers to avoid all Title 2 requirements.²¹⁹ In addition to ending limits on pollution from glider vehicles under the Clean Air Act, the proposal could undermine the remainder of Title 2 motor vehicle controls as well.

EPA has not even considered or evaluated this dramatically harmful result. This result further demonstrates the impermissibility of the proposed reinterpretation: EPA’s interpretation is manifestly inconsistent with the statutory text, structure, and purpose; arbitrarily ignores negative implications for EPA’s heavy duty program as a whole; and invites absurd results.

- iv. The Proposal’s Account of Congress’s Intent is a Speculative Invention and Ignores the Structure and Purposes of the CAA.

EPA relies on the claim that there was limited use of glider kits at the time Congress enacted Section 202(a)(1), and that therefore Congress could not have had them in mind when it adopted the definition of new motor vehicle. This is not discussed anywhere in the legislative history; the suggestion provides no basis to reject the straightforward evidence of Congressional intent provided by the actual statutory text and structure.

Disregarding its own concession that the statutory text encompasses glider kits, and ignoring its own acknowledgement that contextual statutory interpretation looks to “the purpose and context of the statute” as well as the “object and policy” of the law,²²⁰ EPA asks only whether, at the time of enactment, Congress specifically had glider kits and vehicles in mind when it adopted the definition of new motor vehicle.²²¹

²¹⁸ See *United States v. Northeastern Pharmaceutical & Chemical Co., Inc.*, 810 F.2d 726, 743 (8th Cir. 1986) (rejecting interpretation that “would open an enormous, and clearly unintended, loophole in the statutory scheme”).

²¹⁹ Among others, the Engine Manufacturers Association noted this drastic consequence of the proposal in its December 4, 2017 public hearing testimony opposing the proposal. See Testimony of Engine Manufacturers Association, at EPA Hearing (Dec. 4, 2017), available at <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-4299>.

²²⁰ Proposed Rule, 82 Fed. Reg. at 53,445.

²²¹ See 82 Fed. Reg. at 53,445 (asking “whether or not Congress, in defining ‘new motor vehicle’ for purposes of Title 2, had a specific intent to include within the statutory definition such a thing as a glider vehicle” and stating that it is “likely that Congress did not have in mind that the definition would be construed as applying to a vehicle comprised of new body parts and a previously owned powertrain”); *id.* at 53,446 (“[I]t is implausible that Congress would have had in mind that a ‘new motor vehicle’ might also include a vehicle comprised of new body parts and a previously owned powertrain”).

This is not a proper approach to statutory interpretation. The question for purposes of interpreting a statute is not whether, at the time of enactment, Congress was consciously thinking about one fact-specific, future application of a statutory definition designed to address potentially hundreds or more fact-specific applications over many decades of implementation. Rather than engaging in such speculative adventures, the task is to interpret the language of the statute, in light of its context and the statute's purposes, structure and history.

The appropriate question is whether Congress expressed a clear intention on the broader issue of whether a new motor vehicle could include used components. The statute indicates clearly – explicitly -- that Congress specifically intended that new motor vehicles could include used components.²²² As discussed above, the criterion of first transfer of title draws no distinction with respect to the kinds of *components* in the vehicle, the definition expressly states that used engines can be in a new motor vehicle, and used imported vehicles are not distinguished from new.

EPA's effort to defeat the application of a statute whose plain language readily covers a given set of circumstances, based upon EPA's thoroughly speculative claim that Congress did not specifically contemplate application to those circumstances, is patently unfaithful to the Clean Air Act's intended mission to protect the public health and welfare from existing and yet-to-manifest air pollution hazards. The Clean Air Act was drafted in broad terms to allow EPA to deal with new hazards emerging from changing economic activities, ecological conditions, and scientific information.²²³ EPA's approach here ignores all that, gratuitously creating loopholes in the Act's comprehensive scheme. As the Supreme Court put it in a discussion of the same Clean Air Act section in *Massachusetts*:

While the Congresses that drafted § 202(a)(1) might not have appreciated the possibility that burning fossil fuels could lead to global warming, they did understand that without regulatory flexibility, changing circumstances and scientific developments would soon render the Clean Air Act obsolete. The broad language of § 202(a)(1) reflects an intentional effort to confer the flexibility necessary to forestall such obsolescence. See *Pennsylvania Dept. of Corrections v. Yeskey*, 524 U.S. 206, 212 (1998) (“[T]he fact that a statute can be applied in situations not expressly anticipated by Congress does not demonstrate ambiguity. It demonstrates breadth” (internal quotation marks omitted)). Because greenhouse gases fit well within the Clean Air Act's capacious definition of “air pollutant,” we

²²² Indeed, the way the definition was written actually indicates specific Congressional intent that a new motor vehicle, as defined by the statute, with a used engine, would fall under the regulatory authority. See Section V(a) and (b).

²²³ The 1979 Clean Air Act's central purpose was to “establish that the air is a public resource” and to provide an “intensive and comprehensive attack on air pollution”. S. Rept. 91-1196 at 4; *see also* 42 U.S.C. § 1017401(b)(1)-(4); *Union Elec. Co. v. EPA*, 427 U.S. 246, 256 (1976) (Act was “a drastic remedy to what was perceived as a serious and otherwise uncheckable problem of air pollution.”); *Whitman v. American Trucking Assns., Inc.*, 531 U.S. 457, 465-66 (2001).

hold that EPA has the statutory authority to regulate the emission of such gases from new motor vehicles.

549 U.S. 497, 532 (2007).²²⁴ The definition of new motor vehicle reflects similar flexibility and breadth.²²⁵ The claim that Congress needs to have specifically contemplated regulation of glider vehicles is untenable: many cases, besides *Massachusetts*, have confirmed that the CAA is crafted in broad terms to capture changing technologies and new pollution problems. EPA notably fails to explain *why* a Congress so manifestly and consistently concerned about dangers to health and welfare would have wanted to leave these the significant pollution from these vehicles unaddressed.²²⁶

Furthermore, EPA reaches its conclusion without any reference to or reliance on legislative history, other than statutory provisions or the Clean Air Act’s statutory purposes—which each call for a different meaning.²²⁷ Excluding glider vehicles would produce the very harms that Congress legislated against in Section 202. Congress could have, but did not, impose the sort of limitations EPA seeks to impose on it. And putting the broad language concerning new vehicles together with the provisions on rebuilding authority, it is manifest that Congress did not intend to

²²⁴ See *Cablevision Systems Corp. v. F.C.C.*, 649 F.3d 695, 707 (D.C. Cir. 2011) (“When Congress delegates broad authority to an agency to achieve a particular objective, agency action pursuant to that delegated authority may extend beyond the specific manifestations of the problem that prompted Congress to legislate in the first place. See *Consumer Elecs. Ass’n v. FCC*, 347 F.3d 291, 297–99 (D.C. Cir. 2003) (rejecting a *Chevron* step one challenge contending that the Commission’s statutory authority was limited to only the immediate concern Congress empowered the Commission to address and indicating that the use of “broad language” to solve a relatively specific problem “militates strongly in favor of giving [the statute] broad application”).

²²⁵ If the agency is suggesting that it lacks authority over glider vehicles unless Congress specifically states that glider vehicles are to be regulated, that approach is palpably wrong. *Chevron* itself rejects the notion that Congress must evince a specific intent in order for it to delegate authority, since the Court in that case found that Congress had expressed no intent as to whether the ‘bubble concept’ at issue, and ultimately sustained by the Court, was authorized by the Act. See 467 U.S. at 845 (“Once it determined, after its own examination of the legislation, that Congress did not actually have an intent regarding the applicability of the bubble concept to the permit program, the question before it was not whether in its view the concept is ‘inappropriate’ in the general context of a program designed to improve air quality, but whether the Administrator’s view that it is appropriate in the context of this particular program is a reasonable one.”).

²²⁶ See *Northpoint Tech., Ltd. v. FCC*, 412 F.3d 145, 151 (D.C. Cir. 2005) (“A ‘reasonable’ explanation of how an agency’s interpretation serves the statute’s objectives is the stuff of which a ‘permissible’ construction is made.”) (citing *Chevron*, 467 U.S. at 863). “[A]n explanation that is ‘arbitrary, capricious, or manifestly contrary to the statute,’ however, is not.” *Id.* (quoting *Chevron*, 467 U.S. at 844); see also *Humane Society of United States v. Zinke*, 865 F.3d 585, 595 (D.C. Cir. 2017) (“Accordingly, this court must determine whether the Service ‘has advanced a reasonable explanation for its conclusion that the regulations serve . . . [the Act’s] objectives,’ *Chevron*, 467 U.S. at 863, and whether that ‘interpretation . . . is at least reasonable in light of any ambiguities in the statute.’”).

²²⁷ See *UC Health v. NLRB*, 803 F.3d 669, 675 (D.C. Cir. 2015) (an agency construction must be “reasonable and consistent with the statute’s purpose”); *Coal Employment Project v. Dole*, 889 F.2d 1127, 1131 (D.C. Cir. 1989) (to be reasonable, an interpretation must be “consistent with the statutory purpose”); *Abbott Laboratories v. Young*, 920 F.2d 984, 988 (D.C. Cir. 1990) (“The ‘reasonableness’ of an agency’s construction depends on the construction’s ‘fit’ with the statutory language as well as its conformity to statutory purposes.”). Notably, in the preamble to the proposed rule, in describing the “Statutory and Regulatory Context,” 82 Fed. Reg. at 53,443, EPA leaves out language that indicates the protective purpose of the provision: to control “air pollution which may reasonably be anticipated to endanger public health or welfare.” 42 U.S.C. § 7521(a)(1).

create the kind of perverse regulatory gap in the statute’s protections. EPA must abandon its proposed efforts to read its own responsibilities to the public out of the statute.

Though speculating about whether the 1970 Congress specifically contemplated modern glider vehicles is not the proper way to interpret a statute, these speculations are very likely wrong. The contemporaneous understanding at the time of passage of the Clean Air Act, even if relevant, was that glider vehicles were considered new vehicles. The Internal Revenue Service treated a glider vehicle as a new vehicle for federal excise tax purposes, which position was upheld on judicial review. *See Boise National Leasing, Inc. v. United States*, 389 F.2d 634, 636-37 (9th Cir. 1968).²²⁸ If anything, this indicates that, contrary to EPA’s supposition in the proposal, Congress considered glider vehicles to be new motor vehicles when it enacted the CAA’s definitions.

v. EPA’s Reliance on AIDA is Unavailing

Compounding this misunderstanding, EPA next argues that similarity in the definitions used in the CAA and the Automobile Information Disclosure Act of 1958 (AIDA)²²⁹ shows that “Congress intended . . . that a ‘new motor vehicle’ would be understood to mean something equivalent to a ‘new automobile’—i.e., a true ‘showroom new’ vehicle.”²³⁰ EPA’s argument relies on flawed logic,²³¹ and its analysis is superficial and incomplete. It runs directly counter to the established canons of statutory construction to ignore the clear language of the relevant statute while consulting the language in an entirely separate and unrelated statute. Even if AIDA is relevant here, the proposal ignores the other textual provisions of AIDA and how they interact, and does not consider the critical differences between the CAA and AIDA in text and Congressional purpose. A detailed analysis demonstrates that in Title II of the CAA, Congress did not adopt AIDA’s narrow and limited approach, and instead adopted a broader more expansive legislative solution.

Conceding that the legislative history lacks any evidence to support its new theory, EPA asserts that Congress drew from AIDA’s definition of “new automobile” in defining “new motor vehicle” for Title 2 of the CAA. AIDA defines “new automobile” as “an automobile the equitable or legal title to which has never been transferred by a manufacturer, distributor, or dealer to an ultimate purchaser.”²³² Citing this definition, EPA asserts that Congress intended

²²⁸ *See Boise National Leasing, Inc. v. United States*, 389 F.2d 634, 636-37 (9th Cir. 1968). The Internal Revenue Service imposed an excise tax on manufacturers of new trucks made from glider kits. This tax applied when a “taxpayer purchased . . . in packaged or “glider kit” form, all the necessary new elements, including frame, cab, brake system, etc. . . . and then had the structuring and assembling processes done by a third party.” The glider kit process resulted in a “new truck entity having been produced, and not a repairing or reconditioning of the old truck,” and the manufacturer of the new truck entity was subject to the excise tax.

²²⁹ 15 U.S.C. § 1231 et seq.

²³⁰ Proposed Rule, 82 Fed. Reg. at 53,446.

²³¹ ““The tendency to assume that a word that appears in two or more legal rules, and so in connection with more than one purpose, has and should have precisely the same scope in all of them, runs through legal discussions. It has all the tenacity of original sin and must be constantly guarded against.” *General Dynamics Land Systems v. Cline*, 540 U.S. 581, 595 n. 8 (2004) (quoting Cook, “Substance” and “Procedure” in the Conflict of Laws, 42 Yale L. J. 333, 337 (1933)).

²³² 15 U.S.C. § 1231.

“new motor vehicle” under Title 2 of the CAA to mean “a true ‘showroom new’ vehicle.”²³³ First, EPA’s reference to “showroom new” presumably refers to the showroom of a new car dealer. AIDA’s legislative history indicates that this is the focus of AIDA.²³⁴ The problem Congress addressed in AIDA was fraud and deception occurring in the showroom of new car dealers, and it crafted a narrow solution to address it.²³⁵ The result was a requirement for a window label for new cars shown by new car dealers in their showrooms. However, this focus on dealers and their showrooms was driven not by AIDA’s definition of “new automobile,” but by other provisions of that law. That focus derives from a separate section, the requirement that manufacturers affix the window label to a new car prior to delivery of the vehicle to a dealer.²³⁶

In effect, Congress defined new automobile somewhat broadly in AIDA, but then narrowed the labeling requirement by limiting it to only those new automobiles delivered to new car dealers. For example, a new car sold directly by a manufacturer would not be subject to the labeling requirement.²³⁷ While that kind of distribution would not typically occur, this example makes clear that the definition of new automobile is not what ties AIDA to “showroom new” cars; a different section of the law achieves this result. The text of AIDA does not support EPA’s reasoning and conclusion, which relies on the AIDA definition by itself.

In the CAA Congress did not take the narrow approach used in AIDA and did not focus on the subset of vehicles presented for show in new car dealer’s showrooms:

(1) The CAA’s Title 2 provisions address a much broader societal problem – air pollution, reaching broadly across the country - while AIDA addresses a specific consumer information problem involving only new car dealers.²³⁸

(2) Unlike AIDA, the CAA’s definition of new motor vehicle covers many kinds of vehicles in addition to passenger cars. The CAA covers all kinds of cars and trucks, from the smallest passenger car to the largest commercial tractor-trailer. It covers many more kinds of manufacturers and their distribution networks – the ways in which new cars or trucks are sold to their buyers. The vehicles and their manufacturing and distribution

²³³ 82 Fed. Reg. 53,446.

²³⁴ See *Baltimore Luggage Company v. FTC*, 296 F.2d 608 (4th Cir. 1961), (decided several years before adoption of the CAA).

²³⁵ See *Baltimore Luggage Co*, 296 F.2d at 612 (“[T]he legislative history of this Act, 2 U.S.C. Congressional and Administrative News, 85th Congress 1958, p. 2902, in speaking of the purpose of the bill and the need for the legislation, sets out (pp. 2903, 2904, 2905): ‘The primary purpose of the bill is to disclose the manufacturer’s suggested retail price of the new automobile (passenger car or station wagon) so that the buyer will know what it is. This information is not available now.’”).

²³⁶ “Every manufacturer of new automobiles distributed in commerce shall, prior to the delivery of any new automobile to any dealer, or at or prior to the introduction date of new models delivered to a dealer prior to such introduction date, securely affix to the windshield, or side window of such automobile a label on which such manufacturer shall endorse clearly, distinctly and legibly true and correct entries disclosing the following information concerning such automobile” (emphasis supplied) 15 U.S.C. § 1232. The enforcement for this labeling requirement is addressed in 15 U.S.C. § 1233.

²³⁷ 15 U.S.C. § 1232.

²³⁸ Need cite – leg hist? Act has no purpose/intro section

networks are more varied than the limited world of manufacturer deliveries of passenger cars to new car dealers.

(3) Unlike AIDA, the definition of new motor vehicle under Title 2 is not limited to an automobile the title to which has never been transferred to an ultimate purchaser. As explained above, the definition of new motor vehicle under Title 2 is broader in scope, and it is clear that a new motor vehicle may include an engine whose title has already passed to an ultimate purchaser, that is, a new motor vehicle may include a used engine.²³⁹ In addition, it includes all imported vehicles, new and used.²⁴⁰ Thus, on its face the definition of new motor vehicle is not limited to the kind of “showroom new” vehicles shown by new passenger car dealers.

(4) It is AIDA’s manufacturer requirement that focuses AIDA on new car dealers’ showrooms, not AIDA’s definition of new automobile. The parallel manufacturer provision in the CAA, section 203(a), requires that a manufacturer obtain an EPA certificate of conformity before selling, offering for sale, introducing into commerce or delivering a new motor vehicle for introduction into commerce.²⁴¹ Nothing narrows this prohibition or somehow limits Title 2 to vehicles delivered to a dealer for presentation in “showroom new” condition in their showroom. The CAA prohibition is much broader in scope than the labeling requirement in AIDA, properly reflecting the broader scope of the industries involved and the air pollution problem Congress was trying to solve.

Thus, even assuming without evidence that Congress was informed by AIDA, it is clear that Congress rejected the narrow AIDA approach and instead chose a broader and more expansive approach for the CAA. EPA’s grasping at AIDA in the proposal is disconnected from the purpose and structure of the CAA itself.

In any case, there is no justification for EPA’s proposal. It not only does not further the statutory purposes of the CAA, it negates them. This proposal is antithetical to the core statutory objective of protecting public health and the environment from exposure to harmful emissions from motor vehicles, including from heavy duty vehicles and engines.²⁴²

The purpose of Title II is to broadly empower EPA to address harmful motor vehicle air pollution, calling for EPA to control it at its source. The broad scope of the kinds of vehicles covered is matched with clear discretion to adopt reasonable controls that are appropriate under the specific circumstances. EPA’s proposed interpretation does the opposite – it would require EPA to ignore a very large and growing source of harmful air pollution from motor vehicles, and would eliminate EPA’s ability to protect the public from this pollution. Whether or not one agrees with the specific controls adopted by EPA in the 2016 Rule is not the issue. The issue is whether the purposes of section 202(a)(1) of the Act are promoted by totally precluding EPA from addressing in any fashion a major and growing source of motor vehicle air pollution, where the vehicles clearly meet the terms of the definition adopted by Congress. EPA’s 2016 Phase 2

²³⁹ 42 U.S.C. § 7550.

²⁴⁰ *Id.*

²⁴¹ 42 U.S.C. § 7522.

²⁴² *See, e.g.,* CAA §§ 202(a)(1); 202(a)(3)(A), (B); 202(a)(3)(D); 213.

Standards properly promoted the purposes of the Act, but the Agency’s proposed interpretation does just the opposite.

c. EPA has explicit authority to regulate emissions from rebuilt heavy-duty engines.

EPA has explicit authority under Section 202(a)(3)(D) of the CAA to adopt regulations to control emissions from rebuilt heavy-duty engines.²⁴³ This authority independently supports the provisions EPA proposes to repeal, as EPA acknowledged in the Phase 2 Standards themselves.²⁴⁴ Yet EPA does not even address this authority in the Proposed Rule. EPA may not disclaim authority to regulate glider vehicles without explaining how this authority fails to support the standards.

There is no dispute that glider vehicles use exclusively rebuilt heavy-duty diesel engines.²⁴⁵ The Phase 2 Standards explicitly relied on this authority as a separate and stand-alone basis for the glider vehicle provisions.²⁴⁶ Section 202(a)(3)(D) of the Act provides that,

“[t]he Administrator shall study the practice of rebuilding heavy-duty engines and the impact rebuilding has on engine emissions. On the basis of that study and other information available to the Administrator, the Administrator may prescribe requirements to control rebuilding practices, including standards applicable to emission from any rebuilt heavy-duty engines ... which in the Administrator’s judgment cause, or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare taking costs into account.”

EPA must give “appropriate consideration to the cost of compliance within the period and energy and safety factors.”²⁴⁷

As EPA notes in the Proposed Rule, the Agency has previously adopted controls under section 202(a)(3)(D).²⁴⁸ In 2016, EPA again properly exercised its authority under the rebuild authority. EPA has studied the emissions impact of rebuilt engines and of the glider vehicles in which they are placed, and in promulgating regulations implementing the authority, acted on “other information available to the Administrator” in the form of many decades of research confirming

²⁴³ 42 U.S.C. § 7521.

²⁴⁴ See HDP2 Rule 81 Fed. Reg. at 73,518 (listing § 202(a)(3)(D) as among the “multiple authorities” supporting the rule).

²⁴⁵ See, e.g. 81 Fed. Reg. 73,518 n.93; HDP2 Response to Comments at 1879-1880; see also Fitzgerald Glider Kits, About Fitzgerald, <https://www.fitzgeraldgliderkits.com/about-fitzgerald/> (“Fitzgerald Glider Kits specializes in installing the remanufactured main components (engine, transmission and/or rear ends) from a donor truck that was either wrecked or unsafe for the road, into a new cab and chassis built by the OEM.”) (last accessed Jan. 1, 2018).

²⁴⁶ See, e.g., 81 Fed. Reg. 73,518 n.94 (“The engine rebuilding authority of section 202(a)(3)(D) includes removal of an engine from the donor vehicle . . . [and] EPA interprets this language as including installation of the removed engine into a glider kit, thereby assembling a glider vehicle.”); *id.* at 73,519/1-2; *id.* at 73,944 n.991; 73,945/3; 73,946 (“EPA has broad authority to control all pollutant emissions from ‘any’ rebuilt heavy duty engines (including engines beyond their statutory useful life)”) (citing § 202(a)(3)(D)); HDP2 Response to Comments at 1879.

²⁴⁷ 42 U.S.C. § 7521.

²⁴⁸ Proposed Rule, 82 Fed. Reg. 53,443 and n.2, citing 40 CFR § 1068.120; see also 40 CFR § 86.004-40.

the health harms from air pollution caused by the types of engines used in glider vehicles.²⁴⁹ EPA has long found that diesel exhaust contains air pollutants that endanger public health and welfare.²⁵⁰ Likewise, it is well understood that the rebuilt diesel engines in glider vehicles contribute to the air pollution that endangers public health and welfare.²⁵¹ In promulgating the glider provisions of the Phase 2 Standards, EPA conducted the requisite assessments of cost,²⁵² energy,²⁵³ safety,²⁵⁴ and lead time.²⁵⁵

The 2017 Proposed Rule acknowledges EPA’s “authority to address heavy-duty engine rebuilding practices under CAA section 202(a)(3)(D).”²⁵⁶ The Proposed Rule’s failure to explain why, in light of all the relevant factors, it chooses not to exercise this conceded authority—indeed, the agency’s failure to even articulate that it has chosen not to exercise this authority—renders this rulemaking unlawful.

- i. The Agency has not attempted to, and cannot, justify revocation of its exercise of rebuild authority

The proposal ignores that EPA exercised its rebuild authority as a separate basis for the 2016 Phase 2 Standards on glider vehicle engines.²⁵⁷ While the reason for this omission is opaque, the agency is wrong to the extent that it considers its arguments against EPA’s authority under Section 202(a)(1) sufficient to repeal the glider provisions. A new proposal would be required to disclaim the rebuild rationale, which was and is an independent and sufficient basis for the 2016 glider provisions. EPA has not indicated that it is revoking this prior exercise of the rebuild authority, and has failed to explain or justify such an action, a fatal substantive and procedural

²⁴⁹ HDP2 Rule, 81 Fed. Reg. 73,942-43; 61 Fed. Reg. 33,449 (June 27, 1996). Regulation under section 202(a)(3)(D) is not required to be based exclusively on the rebuilding study. Even if it were, EPA may consider factors other than the study in exercising the delegated authority. See *Sierra Club v. EPA*, 323 F.3d 377 (D.C. Cir. 2003).

²⁵⁰ See, e.g., Control of Air Pollution From New Motor Vehicles and New Motor Vehicle Engines; Regulations Requiring Onboard Diagnostic Systems on 2010 and Later Heavy-Duty Engines Used in Highway Applications Over 14,000 Pounds; Revisions to Onboard Diagnostic Requirements for Diesel Highway Heavy-Duty Vehicles Under 14,000 Pounds, 72 Fed. Reg. 3200, 3204/2-3 (Jan. 24, 2007); <https://www.gpo.gov/fdsys/pkg/FR-2007-01-24/pdf/07-110.pdf>; see also *Nat’l Petrochemical and Refiners Assn v. EPA*, 287 F. 3d 1160, 1164 (D.C. Cir. 2002); see also 80 40528 Fed. Reg. 40,528/3 (July 15, 2015) (EPA has long since justified the standards for control of criteria pollutant emissions from heavy duty diesel engines).

²⁵¹ See HDP2 Rule 81 73943 Fed. Reg. 73,943 (glider vehicles will account for 33% of the NOx heavy duty inventory if current production rates continue several more model years, even though only 5% of trucks would be glider vehicles).

²⁵² See, e.g., HDP2 Rule, 81 Fed. Reg. at 73,943/2 (annual monetized benefit of control from \$6-\$14 billion for PM control alone); 80 Fed. Reg. 40,529/1 (July 13, 2015) (low compliance costs); and HDP2 Response to Comments at 1882 (EPA notes that Fitzgerald Glider Kits, the leading manufacturer, states publicly that it can be profitable at 300 glider vehicles annually).

²⁵³ See, e.g., 81 Fed. Reg. 73,517; HDP2 Response to Comments at 1877, -79.

²⁵⁴ See 80 Fed. Reg. 40,529/1 (July 13, 2015).

²⁵⁵ See, e.g. 81 Fed. Reg. 73,518-19 and HDP2 Response to Comment at 1880 (engines certified to current engine model year are available to glider vehicle assemblers at any time).

²⁵⁶ Proposed Rule, 82 Fed. Reg. at 53,443.

²⁵⁷ See e.g. 81 FR 73518/1; 73519/1-2; 73944 n. 991; 73945/3; Response to Comment Background Document (“RTC”) p. 1879.

deficiency.²⁵⁸ The Supreme Court has “frequently reiterated that an agency must cogently explain why it has exercised its discretion in a given manner.”²⁵⁹

EPA’s failure to revoke its authority renders this proposal unlawful—but even if the agency had attempted to revoke its exercise of the authority, no reasoned explanation for doing so exists. As discussed in Section 1 above, the threats posed to public health of these engines’ unregulated emissions was substantial even on the basis of the risk estimates in the 2016 final rule, and more recent information indicates that those threats were significantly underestimated.

The Proposed Rule references earlier exercises of the rebuild authority – though omits some significant examples²⁶⁰— and asserts that “[i]f the interpretation being proposed here were to be finalized, EPA’s authority to address heavy-duty engine rebuilding practices under CAA section 202(a)(3)(D) would not be affected.”²⁶¹ The agency has neither acknowledged that it is changing position regarding its exercise of authority under the engine rebuilding provision²⁶² — indeed, it outright misstates the issue at 82 Fed. Reg. 53,443— and has not offered any explanation for its unacknowledged and unjustifiable change.

EPA independently supported the gliders provisions in its Phase 2 Standards with a compelling justification under section 202(a)(3)(D).²⁶³ EPA has not revoked this separate, stand-alone authority for the glider provisions, and there is no basis for EPA to revoke this exercise of authority over the dangerous and disproportionate pollution from rebuilt diesel engines in glider vehicles. EPA’s failure to consider this issue necessitates a reproposal should the agency still seek to amend any feature of the Phase 2 Standards to alter their substantive terms.

VI. EPA has clear authority to regulate glider kits.

In the Phase 2 Standards, EPA provided that glider kit manufacturers are “incomplete vehicle manufacturers,” and thus responsible for complying with the emission standards established for glider vehicles.

EPA proposes to eliminate the provisions regarding glider kits, offering two grounds: (1) if glider vehicles are not new motor vehicles, then the glider kits cannot be regulated as incomplete new motor vehicles, and (2) a glider kit may not itself meet the definition of “motor vehicle”

²⁵⁸ See *State Farm*, 463 U.S. at 42 (“[A]n agency changing course must supply a reasoned explanation for the change beyond that which may be required when an agency does not act in the first instance”); *id.* at 43 (stating that an agency acts arbitrarily when it “entirely failed to consider an important aspect of the problem”).

²⁵⁹ *State Farm*, 467 U.S. at 48.

²⁶⁰ EPA has regulated the emissions from remanufactured engines in locomotives and marine vessels as new engines. See 40 CFR Part 1042 subpart I (marine engines) and 40 CFR § 92.1(a). These rules are based on the statutory provision that “new motor vehicle engines” can include a used engine. See 63 Fed. Reg. 18980 (April 16, 1998) (applying that definition to non-road engines by analogy); 40 CFR § 92.2 (definition of “new locomotive engine”).

²⁶¹ Proposed Rule, 82 Fed. Reg. at 53,443.

²⁶² See *Encino Motorcars LLC v. Navarro*, 136 S. Ct. 2117, 2126 (2016) (stating that when an agency changes position it must at a minimum acknowledge the change and offer a reasoned explanation for it).

²⁶³ See HDP2 Rule 81 Fed. Reg. at 73,518 (listing § 202(a)(3)(D) as among the “multiple authorities” supporting the rule).

because, lacking a powertrain, it is not self-propelled.²⁶⁴ The Proposal misapprehends the traditional regulatory policy of delegated assembly, which allows that when a motor vehicle has multiple manufacturers, these manufacturers may agree among themselves which is to certify compliance. The Proposal’s new interpretation of glider kits as not meeting the definition of “motor vehicle” is in irreconcilable tension with the Agency’s well-established exercise of authority over emissions from heavy-duty vehicles, which typically have multiple manufacturers.

In addressing its authority over glider kits in the Phase 2 Standards, EPA explained that it “has the authority to regulate incomplete motor vehicles and manufacturers thereof, including unmotorized chassis,” and “considers glider kits to be incomplete motor vehicles and entities manufacturing gliders to be manufacturers of those vehicles.”²⁶⁵ EPA correctly concluded that, for purposes of Title 2 of the CAA, a glider kit manufacturer, which controls the vehicle’s chassis, cab, tires, body, and brakes, is a “manufacturer of a motor vehicle.”²⁶⁶ And, indeed, it makes practical sense for the glider kit manufacturer to be included “as an entity responsible for assuring that glider vehicles meet the Phase 2 vehicle emission standards” because the glider kit manufacturer “control[s] critical elements of the ultimate vehicle’s greenhouse gas emissions, in particular, all aerodynamic features and all emissions related to steer tire type.”²⁶⁷

In the Phase 2 Standards, EPA did not set separate emission standards for glider kits but indicated that either the glider kit manufacturer or the glider vehicle manufacturer could certify compliance with the greenhouse gas vehicle standards.²⁶⁸ EPA indicated that this was a routine application of the ‘delegated assembly’ regulatory provisions, a compliance flexibility which provides that when a new motor vehicle has multiple manufacturers, any of those manufacturers may certify compliance with applicable standards provided certain conditions are satisfied.²⁶⁹ If the glider kit manufacturer chooses not to certify, it must send certain information to the downstream manufacturer of the glider vehicle, including a fuel map for each engine used, or a default map consistent with good engineering judgment should a manufacturer be unable to generate or obtain a fuel map for the actual engine.²⁷⁰ Glider kit manufacturers are also responsible for generating test data with respect to aerodynamics and tires.

As explained in section V above, it is clear that glider vehicles are new motor vehicles. In light of this, it is equally clear that EPA has ample authority to promulgate the various provisions concerning glider kits in the Final Rule. First, EPA has obvious authority to promulgate GHG standards for new motor vehicles, which as discussed above includes glider vehicles. The issue then becomes which entity involved in manufacture of the vehicle must certify compliance with those standards. As EPA explained in the preamble to the Phase 2 Standards, the Act

²⁶⁴ Proposed Rule, 82 Fed. Reg. at 53,446.

²⁶⁵ HDP2 Rule, 81 Fed. Reg. at 73,945.

²⁶⁶ HDP2 Rule, 81 Fed. Reg. at 73,516.

²⁶⁷ 81 Fed. Reg. at 73,516-17.

²⁶⁸ 81 Fed. Reg. at 73,517-18.

²⁶⁹ *Id.* at 73,518 and 73,945 referring to the regulations at 40 CFR part 1037.620 through 1037.622; *see also* RTC p. 1884.

²⁷⁰ 81 Fed. Reg. at 73,942.

contemplates that there can be multiple manufacturers of a motor vehicle.²⁷¹ Indeed, this is routine for heavy-duty vehicles, where one entity typically manufactures a tractor, another the engine, a third manufactures the trailer, and a fourth assembles the tractor trailer.²⁷² Since any manufacturer may certify under section 206 of the CAA, EPA rules have long provided provisions allowing manufacturers to choose which manufacturer certifies and what obligations the non-certifying manufacturer(s) assume.²⁷³ The provisions provide a needed measure of flexibility to the certification process by allowing manufacturers themselves to determine which entity is most appropriate to certify in a given instance, and allows an upstream manufacturer to introduce a vehicle into commerce before it is in certified condition when a downstream manufacturer certifies. As EPA explained in the Phase 2 Standards, the provisions regarding glider kit manufacturers are simply an application of these long-standing provisions.²⁷⁴ They allow, but do not compel, the glider kit manufacturer to certify compliance. In the Proposed Rule, EPA does not provide any considerations to justify eliminating this useful flexibility, intended to ease compliance with the provisions.

Moreover, section 208(a) of the Act provides EPA with authority to regulate manufacturers of “new motor vehicle . . . parts or components”, including authority to “perform tests where such testing is not otherwise reasonably available under this part”. This provision provides additional authority to require glider kit manufacturers to generate engine maps and conduct aerodynamic and tire testing.

Further, CAA Section 203(a)(3)(B) prohibits the use of “defeat” devices and therefore requires the regulation of glider kits under the Act.²⁷⁵ Title II of the CAA defines “defeat” devices to include “any part or component intended for use with, or as part of, any motor vehicle . . . where a principal effect of the part or component is to . . . defeat . . . any . . . element of design installed . . . in a motor vehicle . . . in compliance with regulations under this subchapter.”²⁷⁶ As EPA explained in the Phase 2 Standards, “a glider kit manufacturer furnishing a glider kit in a configuration that would not meet the *tractor* standard when the specified engine, transmission, and axle are installed would likewise *cause a violation of the tractor emission standard*.”²⁷⁷

EPA, therefore, concluded that, “the glider kit would be a defeat device with respect to the tractor vehicle standard, not the separate engine standard. A non-conforming glider kit would adversely affect compliance with the vehicle standard.”²⁷⁸ This logic still holds. A glider vehicle is assembled with defeat device “components” for which a “principal effect” is to duck compliance with EPA regulations for new motor vehicles.

²⁷¹ See 81 Fed. Reg. at 73,515-16, explaining that the definition of manufacturer in section 216(1) contemplates multiple entities since it includes entities engaged in either manufacturing or assembling a new motor vehicle.

²⁷² *Id.* at 73516.

²⁷³ See provisions relating to delegated assembly in sections 1037.620-.622.

²⁷⁴ 81 Fed. Reg. 73,517.

²⁷⁵ 42 U.S.C. § 7522(a)(3)(B).

²⁷⁶ *Id.* § 7522(a)(3)(B).

²⁷⁷ 81 Fed. Reg. at 73,517 (emphasis added).

²⁷⁸ *Id.* at 73,517.

In short, the proposal misidentifies the issue, compromises long-standing and useful delegated assembly regulatory provisions, and is in any case without merit.

VII. EPA's Proposed Repeal is Procedurally Deficient and Arbitrary and Capricious

In any rulemaking, an agency must support all of its decisions by reasoned explanation, comprehensively examining the relevant data and clearly articulating a well-reasoned and complete explanation for its action.²⁷⁹ Whether writing on a clean slate or changing policy previously on the books, an agency acts arbitrarily when it entirely fails to consider an important aspect of the problem it is addressing.²⁸⁰ And where an agency reverses its position, its decision must also be rigorously supported,²⁸¹ including explanations for changes in policy and a “rational connection between the facts found and the choice made.”²⁸² EPA has failed to provide a reasoned explanation for the proposed repeal and has failed to adequately explain the agency's change in position, making the proposed action procedurally deficient and quintessentially arbitrary and capricious. EPA's blinkered analysis is a clear violation of the agency's duty to explain its decision-making, as articulated in *State Farm* and subsequent case law.²⁸³

a. Agencies must justify reversing the course of policy by addressing the existing record.

As the basis for reversing course, the agencies may not offer a justification “that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.”²⁸⁴ Where EPA makes factual findings to support a new policy, and those findings contradict the prior record, it must also provide “a more detailed justification” in demonstrating that the change is reasoned.²⁸⁵ An agency may not “disregard contrary or inconvenient factual determinations that it made in the past, any more than it can ignore inconvenient facts when it writes on a blank slate.”²⁸⁶ In particular, more detailed explanations would be necessary here if a new final determination relies on “factual findings that contradict those which underlay. . . prior policy.”²⁸⁷ No judicial deference is provided to an agency's purported exercise of its technical expertise when that explanation lacks coherence.²⁸⁸

²⁷⁹ See *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43-44 (1983).

²⁸⁰ *State Farm*, 463 U.S. at 43.

²⁸¹ *FCC v. Fox Television Stations, Inc.*, 556 U.S. 502, 515 (2009); See also *State Farm*, 463 U.S. 29 (1983).

²⁸² *State Farm*, 463 U.S. at 43 (citation omitted).

²⁸³ See *id.* at 51.

²⁸⁴ *Id.* at 43.

²⁸⁵ *FCC*, 556 U.S. at 515 (When an agency's “new policy rests upon factual findings that contradict those which underlay its prior policy,” the agency must “provide a more detailed justification than what would suffice for a new policy created on a blank slate.”).

²⁸⁶ *Id.* at 537 (Kennedy, J. concurring).

²⁸⁷ *Id.* at 515.

²⁸⁸ *Tripoli Rocketry Ass'n v. BATFE*, 437 F. 3d 75, 77 (D.C. Cir. 2006) (“The problem in this case is that ATFE's explanation for its determination that APCP deflagrates lacks any coherence. We therefore owe no deference to ATFE's purported expertise because we cannot discern it.”); *Coburn v. McHugh*, 679 F. 3d 924, 926, 934 (D.C. Cir. 2012) (“Because the ABCMR's decisions are largely incomprehensible on these points, they are unworthy of any

In particular, the Supreme Court has emphasized that more detailed explanations may be necessary in the case of rules that involve “serious reliance interests.”²⁸⁹ In this case, freight truck manufacturers have made significant investments in modern pollution controls in reliance on a level playing field,²⁹⁰ one that the glider truck pollution standards rollback would seriously undermine. Moreover, local air quality jurisdictions and regulations across the country rely on federal vehicle standards as part of complex, multi-step deliberations and planning to achieve air quality goals, such as nitrogen oxides reductions in California; these reliance interests will be seriously impacted should EPA move ahead and finalize this proposal.²⁹¹ Under such circumstances, agencies must provide “a more detailed justification” than what is required for a new regulation created on a blank slate.²⁹²

Rulemaking under the Clean Air Act is subject to the general requirements of statutory conformity and reasoned decision-making derived from the Administrative Procedure Act and basic principles of administrative law.²⁹³ Among other requirements, Clean Air Act rules cannot be “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law,” “in excess of statutory jurisdiction, authority, or limitations, or short of statutory right,” or “without observance of procedure required by law.”²⁹⁴

These requirements fully apply to decisions to modify or repeal existing regulations.²⁹⁵ Agencies, including EPA, must adhere to basic standards of reasoned decision-making when they propose to change existing policy by repealing regulations. Although agencies generally enjoy latitude to change their policies, they cannot ignore the policies they propose to abandon, disregard the factual record underlying those policies, adopt new policies that violate the law, or leave changes in policy direction inadequately explained.

Agencies must justify changes in course – with the particular burden of justification depending upon the circumstances. Among other things, an agency seeking to repeal existing policy must:

deference.”); *see also* *Haselwander v. McHugh*, 774 F. 3d 990, 996 (D.C. Cir. 2014); *Global Tel*Link v. FCC*, 859 F.3d 39, 56 (D.C. Cir. 2017).

²⁸⁹ *FCC*, 556 U.S. at 515; *see also* *Encino Motorcars, LLC v. Navarro*, 136 S. Ct. 2117, 2126 (2016).

²⁹⁰ *See, e.g.*, Testimony of Glen Kedzie, American Trucking Associations, EPA public hearing on Proposed Rule (December 4, 2017) (“ATA members buy a tremendous amount of new equipment and pay a premium price investing in clean engine technologies.”).

²⁹¹ *See, e.g.*, Testimony of Steve Cliff, Deputy Executive Officer, California Air Resources Board, EPA public hearing on Proposed Rule (December 4, 2017) (“Gliders are so much higher emitting than modern trucks that even if only a small number of them operate in California, California’s overall air quality progress will be impeded.”).

²⁹² *FCC*, 556 U.S. at 515-16.

²⁹³ *See* 42 U.S.C. 7607(d)(9); *see also* 5 U.S.C. 706(1); *Catawba County v. EPA*, 571 F.3d 20, 41 (D.C. Cir. 2009) (discussing CAA and APA review standards).

²⁹⁴ 42 U.S.C. 7607(d)(9)(A, C, D).

²⁹⁵ *See FCC v. Fox Television Stations, Inc.*, 556 U.S. 502, 514-15 (2009); *Motor Vehicle Mfrs. Ass'n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43-44 (1983); *see Nat'l Ass'n of Home Builders v. EPA*, 682 F.3d 1032, 1038 (D.C. Cir. 2012).

- (1) Acknowledge the change in policy;²⁹⁶
- (2) Provide a “reasoned explanation” for changing course;²⁹⁷
- (3) Demonstrate that the new policy is itself consistent with the governing statute;²⁹⁸
- (4) Ensure that the new policy is itself supported by the record, “based on consideration of the relevant factors,” and supported with “rational connection[s] between the facts found and the choice made”;²⁹⁹
- (5) Explain why the agency is rejecting policy judgments or factual determinations underlying the prior rule;³⁰⁰
- (6) Consider relevant alternatives reflected in the prior rule’s record, and explain why agency is not adopting them in the new rule;³⁰¹
- (7) Address “serious reliance interests” grounded on the prior policy.³⁰²

When changing regulations by amendment, agencies must provide a “reasoned explanation for the change.”³⁰³ They must “of course. . . show that there are good reasons for the new policy,” and they must acknowledge and address ways in which the “new policy rests upon factual

²⁹⁶ See *FCC*, 556 U.S. at 514-15 (to change course an agency must “display awareness that it is changing position,” and “show that there are good reasons for the new policy”). See *Verizon v. FCC*, 740 F.3d 623, 636 (D.C. Cir. 2014) (agency must “acknowledge” and “explain the reasons for a changed interpretation”).

²⁹⁷ *State Farm*, 463 U.S. at 42. See also *AMB Onsite Services-West v. NLRB*, 849 F.3d 1137, 1146 (D.C. Cir. 2017) (“It is well-settled that NLRB. . . cannot ‘turn[] its back on its own precedent and policy without reasoned explanation.’”) (quoting *Dupuy v. NLRB*, 806 F.3d 556, 563 (D.C. Cir. 2015)); see *Public Citizen v. Steed*, 733 F.2d 93, 98 (D.C. Cir. 1984); see also; *Verizon v. FCC*, 740 F.3d 623, 636 (D.C. Cir. 2014).

²⁹⁸ See *FCC*, 556 U.S. at 514-15 (new policy must be “permissible under the statute”); see also *Nat’l Cable & Telecomms. Ass’n v. Brand X Internet Servs.*, 545 U.S. 967, 981 (2005); *Chevron USA v. NRDC*, 467 U.S. 837, 865-66 (1984); see *Public Citizen v. Fed. Motor Carrier Safety Admin.*, 374 F.3d 1209, 1216 (D.C. Cir. 2004).

²⁹⁹ See *State Farm*, 463 U.S. at 43 (agency decision must be “based on a consideration of the relevant factors” and agency cannot have “relied on factors which Congress has not intended it to consider”) (quoting *Burlington Truck Lines v. United States*, 371 U.S. 156, 168 (1962)); *Pub. Citizen v. Fed. Motor Carrier Safety Admin.*, 374 F.3d 1209, 1216 (D.C. Cir. 2004); 42 U.S.C. 7607(d)(9).

³⁰⁰ *FCC*, 556 U.S. at 516 (“when . . . [a] new policy rests upon factual findings that contradict those which underlay its prior policy” agency must provide “a more detailed justification than what would suffice for a new policy created on a blank slate”; agency must supply adequate grounds “for disregarding facts and circumstances that underlay or were engendered by” prior rule); *Pub. Citizen*, 733 F.2d at 98 (agency must “‘cogently explain’” basis for suspending rule) (quoting *State Farm*, 463 U.S. at 48); *Organized Village of Kake v. U.S. Dep’t off Agric.*, 795 F.3d 956, 968-969 (9th Cir. 2015); *AMB Onsite Services-West v. NLRB*, 849 F.3d 1137, 1146 (D.C. Cir. 2017); see also, *Humane Soc’y v. Locke*, 626 F.3d 1040, 1051 (9th Cir. 2010).

³⁰¹ *State Farm*, 463 U.S. at 51 (finding that NHTSA had arbitrarily failed to explain its rejection of option of requiring airbags despite its prior finding “that airbags are an effective and cost-beneficial life-saving technology”); *Pub. Citizen v. Steed*, 733 F.2d 93, 100 (D.C. Cir. 1984) (setting aside suspension of rule because NHTSA “failed to explain why alternatives, which the rulemaking record indicates were available to the agency, could not correct” problem agency relied on as basis for suspending rule); *Int’l Ladies’ Garment Workers’ Union v. Donovan*, 722 F.2d 795, 816 (D.C. Cir. 1983) (agency impermissibly failed to consider alternatives to repeal “raised in [the] original notice and the comments”).

³⁰² See, e.g., *Encino Motorcars v. Navarro*, 136 S. Ct. 2117, 2126 (2016) (quoting *FCC*, 556 U.S., at 515); see also *Smiley v. Citibank South Dakota*, 517 U.S. 735, 742 (1996); *U.S. Telecom Ass’n v. FCC*, 825 F.3d 674, 708 (D.C. Cir. 2016).

³⁰³ *Encino Motorcars v. Navarro*, 136 S. Ct. at 2125 (citing *Nat’l Cable & Telecomms. Assn. v. Brand X Internet Serv.*, 545 U.S. 967, 981–982 (2005) and *NRDC v. Chevron*, 467 U.S. 837, 863–864 (1984)).

findings that contradict those which underlay its prior policy.”³⁰⁴ As *State Farm* explains, an agency proposing to change policy must squarely address the legal and record bases of the policy it proposes to repeal and must explain why it is changing course.³⁰⁵ An agency proposing a regulatory change must openly address and analyze the *substance* of the old and new policies, including both their evidentiary bases and the relation to the relevant statute.³⁰⁶ It must also provide a reasoned explanation for rejecting or discounting the importance of facts that it had previously relied upon.³⁰⁷

b. EPA has utterly failed to address the existing record for the glider provisions, failing to properly justify the Proposed Repeal.

EPA’s failure to consider any of the myriad factual and policy issues implicated by revoking the glider truck pollution limits violates bedrock principles of reasoned decision-making. These principles require that agencies consider all relevant factors, provide a rational explanation for their policy choices, address relevant factual issues, and respond to significant issues and concerns raised in the public comments.

EPA’s proposal to exempt glider vehicles from pollution limits disregards these constraints. As in *State Farm*,³⁰⁸ the agency’s casual approach to deregulation has included scant consideration of the urgent public hazard its proposal would create. EPA is proposing to excuse glider trucks entirely from any modern pollution limits, so that there will be no federal protections in place against the dangerous pollutants from this growing source. That lack of protection is in direct conflict with EPA’s findings concerning the growing pollution burden from glider trucks, and EPA’s own statutory obligation to address these pollutants and protect public health. If EPA is to finalize the Proposed Rule, the agency has an obligation to explain why it is departing from the well-documented determinations made in the 2016 Phase 2 Standards. Yet, in the proposal, EPA fails to address the factual record.

EPA’s Proposed Rule is devoid of any real acknowledgment of major health risks from glider vehicles’ disproportionate pollution. So far as the Proposed Rule reveals, EPA has given no consideration to the impact of glider truck emissions and the proposed repeal on public health and welfare; indeed, the agency’s new report on glider vehicle emissions goes unmentioned even though it shows the pollution from glider vehicles is even worse than the agency anticipated in the Phase 2 Standards. The central health- and welfare-protective purpose of Clean Air Act Section 202 is missing from EPA’s statutory analysis, which is driven instead by an effort to shrink and avoid EPA’s obligations to control pollution from heavy-duty diesel engines and vehicles. Numerous additional consequential factors that EPA has failed to address, including environmental justice concerns, the effect on heavy-duty industry investments in emission controls, the effects on small business dealers, impacts on states’ ability to meet NAAQS, and

³⁰⁴ *FCC*, 556 U.S. 502, 515 (2009).

³⁰⁵ *State Farm*, 463 U.S. at 41-42.

³⁰⁶ *See id.* at 46-49.

³⁰⁷ *FCC*, 556 U.S. 502, 515-16.

³⁰⁸ *State Farm*, 463 U.S. at 52-53 (noting undisputed evidence that use of seat belts would save many lives).

the implications of the proposed interpretation of the statute on other vehicle standards, are itemized in Section 7(e) below.

EPA may not avoid its obligation to confront its own findings by claiming that the Proposed Rule is exclusively statutory in nature.³⁰⁹ The statute is centrally concerned with pollution control, and EPA’s proposal would cause dramatic increases in pollution, while also undermining emissions standards for other heavy-duty vehicles whose sales are directly impacted by the proliferation of glider vehicles. EPA may not avoid (either as a matter of reasoned statutory construction under *Chevron* or as “reasoned decisionmaking” under *State Farm*) analysis of how its proposed action relates to these factors.

Similarly, EPA cannot rationally choose among alternative interpretations of the Clean Air Act without considering the practical consequences of the alternative interpretations. EPA’s proposal does not meaningfully address any of the underlying factual and policy judgments. Nor does EPA’s proposal demonstrate why EPA’s new interpretation is preferable in light of the purposes set out in the statute.

EPA cannot reasonably claim that this statute is so clear that it eliminates the need to consider facts and evidence.³¹⁰ Furthermore, the agency makes clear in the proposal that it does not believe the proposed course of action is commanded by the statute (as it clearly cannot), using clearly discretionary language such as “EPA is now proposing to find that the most reasonable reading of the relevant provisions”³¹¹ is its new interpretation, and noting that the agency “is entitled to assess administrative records and evaluate priorities in light of the philosophy of the administration.”³¹²

c. EPA has failed to justify the Proposed Repeal in light of the heavy-duty industry’s reliance interests in maintaining the Phase 2 glider provisions.

EPA also has given no consideration to the substantial reliance interests that would be undone were EPA to finalize its repeal as proposed.³¹³ A diverse array of heavy duty freight industry constituents — tractor manufacturers, engine manufacturers, pollution control equipment

³⁰⁹ 82 Fed. Reg. 53,442, 53,444-46 (Nov. 16, 2017).

³¹⁰ See *Peter Pan Bus Lines v. Fed. Motor Carrier Safety Admin.*, 471 F.3d 1350, 1354 (D.C.Cir.2006) (“ ‘deference to an agency’s interpretation of a statute is not appropriate when the agency wrongly believes that interpretation is compelled by Congress’”) (quoting *PDK Laboratories v. DEA*, 362 F.3d 786, 798 (D.C.Cir. 2004) (other citations omitted)); *Peter Pan*, 471 F.3d at 1354 (“As we explained in *PDK*, *Chevron* step 2 deference is reserved for those instances when an agency recognizes that the Congress’s intent is not plain from the statute’s face. ‘In precisely those kinds of cases, it is incumbent upon the agency not to rest simply on its parsing of the statutory language’— ‘[language]— “[i]t must bring its experience and expertise to bear in light of competing interests at stake.’ ””) (quoting *PDK*, 362 F.3d at 797–98 (citing *Chevron v. NRDC*, 467 U.S. 837, 865–66 (1984))); *Prill v. NLRB*, 755 F.2d 941, 947–48 (D.C. Cir. 1985) (agency commits reversible error when agency erroneously concludes that particular regulatory action is mandated by statute, rather than based on its “own judgment”).

³¹¹ 82 Fed. Reg. at 53,447.

³¹² 82 Fed. Reg. at 53,443.

³¹³ See *Mexichem Flour v. EPA*, 866 F.3d 451, 462 (D. C. Cir. 2017) (“to the extent that EPA’s prior approach had ‘engendered serious reliance interests,’ EPA would need to provide a ‘more detailed justification’ for its change”) (quoting”, *FCC v. Fox Television Stations*, 566 U.S. 502, 515 (2009)).

manufacturers, large fleet operators, and truck dealers— travelled to the December 4 public hearing to underscore that this proposal will undercut to their settled expectations and investment in modern pollution control of heavy duty trucks. EPA’s failure to address this issue is itself fatal legal error.³¹⁴

d. EPA has failed to provide adequate notice of key issues.

EPA fails to provide adequate notice of any of the key issues involved, much less how the agency evaluates and intends to address those issues. The critical issues on which the agency has failed to provide notice are many. Among these are:

1. any discussion of the proposal’s environmental and public health consequences;
2. any discussion of the impacts the proposal would have on environmental justice and near-road communities, which will be disproportionately exposed to the diesel exhaust from glider vehicles;
3. any discussion of the impacts on manufacturers and dealers (many of them small businesses) of current engines and trucks;
4. any discussion of the implications for attainment and maintenance of PM and ozone NAAQS;
5. any discussion of the safety of glider vehicles;
6. any discussion of why—or even whether—having exercised its section 202 (a)(3)(D) authority over rebuilt diesel engines in the Phase 2 Standards, EPA now is choosing to revoke its exercise of that authority;
7. and most fundamentally, any discussion of how the proposal is consistent with the goals and objectives of the Clean Air Act.

To provide adequate notice, an agency must “make its views known to the public in a concrete and focused form so as to make criticism or formulation of alternatives possible”.³¹⁵ This is impossible here given the agency’s failure even to mention, much less rationally discuss, the host of issues essential to the question of whether unregulated operation of the high-polluting glider vehicles should be allowed.

Moreover, the obligation to provide adequate notice “is especially important in light of Congress’ intent, expressed in Section 307(d) [of the CAA], that EPA provide a detailed proposal for interested parties to focus their comments on.”³¹⁶ Section 307(d)(3) of the Act requires that EPA provide notice in the proposed rule of “the factual data on which the proposed rule is based”, “the methodology used in obtaining the data and in analyzing the data”, and the “major ... policy considerations underlying the proposed rule.” All these data and documents are to be included in the docket on the date of proposal. Section 307(d)(6) provides that a regulation “may not be based (in part or whole) on any information or data which has not been placed in the docket as of the date of promulgation.”³¹⁷ EPA has failed to comply with these

³¹⁴ See Section V above.

³¹⁵ *Home Box Office v. FCC*, 567 F.2d 9, 36 (D.C.Cir. 1977).

³¹⁶ *Small Refiner Lead Phase-Down Task Force v. EPA*, 705 F. 2d 506, 546 (D.C. Cir. 1983).

³¹⁷ 42 U.S.C. § 7607. See also *Small Refiner Lead Phase-Down Task Force*, 705 F.2d 506, 519 (“The final rule must be based entirely on material that has ‘been placed in the docket as of the date of ... promulgation’”).

requirements. EPA invokes the Tennessee Technical University letter on glider vehicle emissions without disclosing any relevant information, such as the study's test conditions and methodology, or the discussion between EPA technical staff and TTU discussed above.³¹⁸ Nor has EPA made available the emissions data supporting the TTU study conclusions it references in the proposal,³¹⁹ undermining the public's ability to meaningfully comment on it.³²⁰

The proposal also fails to disclose that the agency had conducted its own emission tests in 2017, which not only confirm the magnitude of glider vehicle emissions but indicate that those emissions are even higher than initially estimated. Documentation of EPA's own emissions testing and of EPA's teleconference with TTU on TTU's testing methodology was not posted to the rule docket until November 22, 2017,³²¹ several days after publication of the proposal, limiting stakeholders' ability to assess and comment on it.³²² The proposal also makes no mention of the meeting between Fitzgerald and Administrator Pruitt, which likely influenced the reopening of the 2016 final rule and hence is "information ... on which the proposed rule relies".³²³ These omissions and delayed availability of centrally relevant data are and in clear violation of section 307(d)(3), section 307(d)(6), and basic administrative due process.³²⁴ Indeed, Congress intended notice and opportunity for comment to be particularly extensive under section 307(d)(3) the CAA.³²⁵

Without any indication from the agency of its views on any of the relevant and vital issues on which EPA failed to provide notice, no final action in this proceeding is possible unless and until adequate notice and opportunity to comment are provided by the agency.³²⁶ In light of the agency's failure to provide notice of any number of key facts upon which the proposed repeal is

³¹⁸ See Section I above.

³¹⁹ See Email from William Charmley to Tom Brewer, Doc. ID: EPA-HQ-OAR-2014-0827-4272, available at <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-4272>.

³²⁰ *Kennecott Corp. v. EPA*, 684 F.2d 1007, 1019 (D.C. Cir. 1982) (documents which "form a basis for the regulations . . . should properly have been included in the docket" and "EPA's failure to include such documents constitutes reversible error"); "Integral to an agency's notice requirement is its duty to "identify and make available technical studies and data that it has employed in reaching the decisions to propose particular rules. *Kern Cty. Farm Bureau v. Allen*, 450 F.3d 1072, 1076 (9th Cir. 2006) ("An agency commits serious procedural error when it fails to reveal portions of the technical basis for a proposed rule in time to allow for meaningful commentary.") (quoting *Solite Corp. v. EPA*, 952 F.2d 473, 484 (D.C. Cir. 1991)).

³²¹ The date that the memo was posted to the docket is indicated at <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-2417>.

³²² See Section VIII.

³²³ 42 U.S.C. § 7607; see Section IX below.)

³²⁴ *Sierra Club v. Costle*, 657 F.2d 298, 398 (D.C. Cir. 1981) ("If . . . documents of central importance upon which EPA intended to rely had been entered on the docket too late for any meaningful public comment prior to promulgation, then both the structure and spirit of section 307 would have been violated.").

³²⁵ See, e.g., H.R. Rep. at 319, 4 Leg. Hist. 2786, 1977 U.S. Code Cong. & Ad. News at 1398 (the new procedures will "insure an effective opportunity for public participation in the rulemaking process"); 123 Cong. Rec. 27,075 (1977), 3 Leg. Hist. 333 (statement of Rep. Broyhill) (the new procedures "will assure the opportunity for more extensive public participation in the rulemaking process").

³²⁶ *Ne. Maryland Waste Disposal Auth. v. EPA*, 358 F.3d 936, 949 (D.C. Cir. 2004) ("Without a readily accessible statement of the agency's rationale, interested parties cannot comment meaningfully during the rulemaking process.")

based,³²⁷ or of major legal interpretations underlying the proposed rule,³²⁸ EPA must issue a reproposal should the agency still seek to substantively amend any feature of the Phase 2 Standards.³²⁹

Not only must EPA rely on docketed information in promulgating a rulemaking, the agency is required under section 307(d)(6)(B) to respond to significant comments.³³⁰ Failure to do so constitutes a procedural failure.³³¹

e. The Proposal Fails to Consider, Let Alone Reasonably Address, an Array of the Factors Relevant to EPA's Decision.

An agency acts arbitrarily when it “entirely failed to consider an important aspect of the problem.”³³² The proposal fails to consider a host of critical issues:

— *Any consideration of environmental consequences.* EPA estimated in the 2016 Final Rule that each model year of glider vehicle production at an estimated 10,000 vehicles per year would result in from 700-1600 premature mortalities.³³³ This estimate is for exposure to PM2.5 alone, and does not account for cancers caused by exposure to the unfiltered diesel exhaust or from exposure to ozone. It now appears that these estimates are too low — measured PM emissions from a Fitzgerald glider truck were up to 10 times higher than EPA estimated in its risk assessment.³³⁴ EDF's own modeling indicates that, with the likely increase in glider vehicle sales, pollution burdens from this Proposed Rule may be even more significant than EPA's 2016 evaluation.³³⁵ The Proposal ignores the issue, except for an offhand statement (after noting that health benefits to children from the 2016 Final Rule would be lost) that NAAQS protections remain.³³⁶ There is no NAAQS for diesel exhaust, and EPA says nothing whatever about what means, if any, could be available to the States to address the additional NAAQS pollution. And if Congress intended that the NAAQS would be sufficient protection from vehicular air pollution, it would not have enacted Title 2 of the Clean Air Act. This glaring omission itself renders the proposal fatally arbitrary.

³²⁷ 42 U.S.C. § 7607.

³²⁸ *Id.*

³²⁹ *Kennecott Corp. v. EPA.*, 684 F.2d 1007, 1019–20 (D.C. Cir. 1982) (where data of central relevance to the rulemaking was not placed in the docket until shortly before promulgation, “EPA's refusal to convene a new round of public comment proceedings constitute[ed] reversible error under s 307(d)(9)”; *Union Oil Co. of California v. U.S. E.P.A.*, 821 F.2d 678, 682-83 (D.C. Cir. 1987) (The “docket must provide the entire basis for the final rule . . . failure to docket data and analysis relied upon in formulating a final rule violates § 307(d)(6)(C) of the Clean Air Act”).

³³⁰ 42 U.S.C. § 7607.

³³¹ *Ne. Maryland Waste Disposal Auth. v. EPA.*, 358 F.3d 936, 950 (D.C. Cir. 2004).

³³² *State Farm*, 463 U.S. at 43.

³³³ See HDP2 Response to Comments at 1965 & 1963.

³³⁴ U.S. Environmental Protection Agency, Chassis Dynamometer Testing of Two Recent Model Year Heavy-Duty On-Highway Diesel Glider Vehicles, Nov. 20, 2017, Docket No. EPA-HQ-OAR-2014-0827-2417.

³³⁵ See Section 1(g).

³³⁶ 82 Fed. Reg. 53,442; 53,448.

While EPA’s failure to consider the impact of increased emissions on human health is a core error, it is hardly the only important consideration that EPA has failed to consider in the proposed rule:

— *Any consideration of the proposal’s implications.* As explained at above³³⁷, the proposal rests on a theory that threatens to undermine all Title 2 vehicular controls: put a used part on an otherwise new motor vehicle and Title 2 no longer applies. The proposal could also undermine existing standards for remanufactured marine and locomotive engines. The agency has failed to address these implications.

— *Any consideration of environmental justice issues.* Near-roadway communities will be exposed to additional harmful pollution from glider vehicles under this Proposed Rule.³³⁸ These communities are disproportionately low-income communities of color. Under Executive Order 12,898, EPA has a responsibility to evaluate these impacts—yet the proposal provides no analysis or consideration of this issue.

— *Effects on trucking and engine manufacturing industries.* By sanctioning unlimited pollution emissions from glider vehicles, the proposal leads to a unlevel playing field, putting at risk investments and jobs in protective vehicular and engine emission controls.³³⁹ An unlevel playing field will also adversely impact dealers of new trucks meeting current emission standards.³⁴⁰ The proposal fails to address these impacts, or otherwise consider them.

— *Existence and exercise of authority over rebuilt diesel engines.* As explained above³⁴¹, section 202(a)(3)(D) of the Act not only provides explicit authority over rebuilt diesel engines, but EPA exercised that authority in the 2016 Final Rule to control emissions from rebuilt diesel engines in glider vehicles. The proposal unlawfully fails to explain why it is choosing to revoke its exercise of that authority.

— *Implications for attaining and maintaining PM and Ozone NAAQS.* Several states testified at the public hearing that states have factored in the restrictions on uncontrolled glider vehicular emissions into PM and NOx budgets. The proposal undermines these efforts and fails to address the issue. The proposal also fails to address the implications for stationary sources. The additional NOx and PM emissions will need to be made up out of stationary source emissions. The proposal again fails to address this issue.

³³⁷ See Section V above.

³³⁸ See, e.g. Testimony of David Friedman, Consumers Union, , EPA public hearing on Proposed Rule (December 4, 2017); Testimony of Blanca Iris Verduzco, East Yard Communities for Environmental Justice, EPA public hearing on Proposed Rule (December 4, 2017).

³³⁹ See, e.g., Testimony of Glen Kedzie, American Trucking Association, EPA public hearing on Proposed Rule (December 4, 2017); Testimony of Volvo, EPA public hearing on Proposed Rule (December 4, 2017); Testimony of Heavy Duty Fuel Efficiency Group, EPA public hearing on Proposed Rule (December 4, 2017).

³⁴⁰ See, e.g., Testimony of Robert Nuss, Nuss Trucks & Equipment, EPA public hearing on Proposed Rule (Dec. 4, 2017), ID No. EPA-HQ-OAR-2014-0827-4307 available at <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-4307>.

³⁴¹ Section V above.

— *Cost Benefit*. The 2016 Phase 2 Standards are conservatively estimated to yield monetized benefits of \$3 to \$11 billion each model year — and just for PM_{2.5} reductions.³⁴² The proposal fails to address why, given the explicit authority over emissions from new and rebuilt diesel engines, it would forgo these benefits. Indeed, the Proposed Rule does not include a cost-benefit analysis of the proposed course of action, just a brief and high-level economic assessment³⁴³-- even though the Proposed Rule acknowledges that it is a “significant regulatory action” under Executive Order 12,866.³⁴⁴

— *EPA Tests of Glider Vehicle Emissions*. Tests of glider vehicular emissions conducted at the EPA lab showed NO_x and PM emissions at or higher than EPA initially estimated. The proposal omits mention of these tests and otherwise fails to account for this test information. Instead, it refers to a study conducted by Tennessee Tech University, ignoring this study’s many deficiencies.³⁴⁵ By failing to address the most relevant technical information, the Proposed Rule is again impermissibly arbitrary.

These serious omissions are only a partial list of critical issues which the proposal outright misses or otherwise fails to address sufficiently, rendering the proposal fatally arbitrary. As explained in the preceding section, these omissions also constitute impermissible lack of notice as to critical issues, necessitating a repoposal should EPA decide to proceed with this matter.

VIII. EPA’s process has been inappropriately rushed.

EPA’s rulemaking process has been inappropriately rushed, providing inadequate opportunity to comment on the numerous complex and troubling aspects of this rulemaking.

EPA’s proposed rule was published on November 16, 2017.³⁴⁶ After a short comment period, encompassing three separate federal holidays, comments are due on January 5, 2018.³⁴⁷ EPA summarily rejected two reasonable and well-supported requests for additional time to comment from the American Lung Association (ALA) and the Northeast States for Coordinated Air Use Management (NESCAUM). As ALA noted, it requested additional time for comment in light of the significant public health ramifications of the proposal, the new information added to the docket and the challenge of the brief comment period:

EPA added an important analysis of glider truck emissions to the docket on November 22, 2017 that requires more time for review than is currently available. ... Further, on November 22, 2017, EPA added a memorandum to the docket: “EPA Teleconference with Tennessee Tech University Regarding Glider Test Report Summarized in June 2017 Letter.” The proposed repeal cites the analysis from

³⁴² HDP2 Response to Comments at 1965.

³⁴³ U.S. Environmental Protection Agency, Memorandum: Assessment of Economic Factors Associated with the Proposed Repeal of Emission Requirements for Glider Vehicles, Glider Engines, and Glider Kits, Nov. 16, 2017, EPA-HQ-OAR-2014-0827-2407.

³⁴⁴ Proposed Rule, 82 Fed. Reg. at 53,447.

³⁴⁵ See Section I above.

³⁴⁶ 82 Fed. Reg. at 53,442.

³⁴⁷ Id.

Tennessee Technological University as justification for the proposal; however, the EPA memorandum raises many questions about the University's analysis, the test procedures followed and the results presented. The memorandum indicates that EPA will request additional information about "each of the test articles regarding engine and vehicle mileage and age" and "NOx emission levels associated with each test article." However, as of December 19, 2017, no additional information has been posted to the docket.³⁴⁸

Meanwhile, NESCAUM specifically noted that

The US EPA's test results indicate significant burdens will be placed upon our state air quality programs by allowing for a large increase of NOx and fine particulate emissions from on-road heavy-duty trucks that had not previously been expected or accounted for by state air quality planners. The obvious implications of the US EPA study for public health protection deserve a fuller consideration than currently provided by the January 5, 2018 comment deadline.³⁴⁹

EPA summarily rejected these two well-founded requests in essentially identical letters that emphasized concern about making a timely decision before the January 1, 2018 provisions take effect.³⁵⁰ But the only interests desiring the upheaval of the status quo provisions are those of the glider industry. In keeping with the inappropriate bias that has colored this process,³⁵¹ EPA did not acknowledge the numerous other important stakeholder interests at risk due to the agency's unduly rushed process.

This rush is particularly notable when compared with the multiple opportunities for input on glider industry issues provided for as part of the development of the Phase 2 Standards. EPA and NHTSA's Phase 2 proposed rule was published on July 13, 2015, with comments due on September 11, 2015;³⁵² EPA and NHTSA subsequently extended the comment period to October 1, 2015.³⁵³ EPA offered an additional opportunity to comment on glider vehicle-related issues when it published a Notice of Data Availability on March 2, 2016, with comments due on April 1, 2016.³⁵⁴ As discussed below in Section XI(b), as part of the Phase 2 Rulemaking EPA

³⁴⁸ American Lung Association, Request for Extension, *available at* https://www.epa.gov/sites/production/files/2017-12/documents/ala-glider-nprm-extension-request-2017-12-20_0.pdf.

³⁴⁹ Northeast States for Coordinated Air Use Management, Request for Extension, *available at* <https://www.epa.gov/sites/production/files/2017-12/documents/nescaum-glider-nprm-extension-request-2017-12-14.pdf>

³⁵⁰ See, e.g., Letter from EPA to American Lung Association Denying Request to Extend Comment Deadline, *available at* <https://www.epa.gov/sites/production/files/2017-12/documents/ala-glider-response-letter-2017-12-21.pdf>.

³⁵¹ See Section XI.

³⁵² Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles—Phase 2 Proposed Rule, 80 Fed. Reg. 40,138 (July 13, 2015).

³⁵³ Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles - Phase 2; Extension of the Comment Period, available at <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-0921>.

³⁵⁴ Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles—Phase 2—Notice of Data Availability, 81 Fed. Reg. 10,822 (Mar. 2, 2016).

convened a small business panel and published a proposed and final regulatory flexibility analysis, all with specific portions focused on considering and soliciting input on glider industry issues.

IX. The circumstances of this proposal strongly suggest that it was based on improper factors.

The circumstances under which EPA issued the Proposed Rule strongly suggest a decision that was made on considerations other than the legal and factual merits. First, although multiple parties sought review of the 2016 Phase 2 Standards in the U.S. Court of Appeals for the D.C. Circuit, no party raised claims against the glider provisions before the court. Not one glider vehicle manufacturer petitioned for review of the rule – nor did any other party challenge EPA’s authority to regulate glider vehicles in court. Furthermore, as EPA noted in the Phase 2 rulemaking, even as raised in the public comments in the Phase 2 rulemaking, the argument that EPA lacked authority to regulate glider vehicles “appears to be untimely” because the Phase 1 rule had included an interim exemption for gliders which rested on the position that gliders were subject to regulation under Section 202.³⁵⁵ EPA thus is attempting to revisit a decision that was settled twice over, based upon an impermissible statutory interpretation that the glider industry had not deemed sufficiently strong to present to the court.

EPA’s decision to revisit its decision in both the Phase 1 and Phase 2 rulemakings that gliders are “new motor vehicles” under Title 22 of the CAA came only after a non-docketed May meeting between EPA Administrator Pruitt and representatives of glider company Fitzgerald Glider Kits at EPA headquarters.³⁵⁶ That meeting was followed two months later by a petition for reconsideration filed by Fitzgerald and others on July 10, 2017, long after the time for judicial review had run, and months after litigation had commenced.

The May 2017 private meeting appears to have played a major role in the agency’s decision to reinstate rulemaking, yet no information about the meeting is listed in the docket. EPA should address the role of the May meeting with Fitzgerald in its rulemaking. The facts and circumstances surrounding that meeting and any commitments made by EPA should be publicly docketed.³⁵⁷

Nor is the May 2017 meeting the only aspect of the procedures leading to the proposal that raise serious concerns about the integrity of the rulemaking process. Without detailing its substance or vouching for its accuracy, EPA in its proposed repeal cited to an industry-sponsored study performed by Tennessee Technological University at Fitzgerald’s facility using Fitzgerald

³⁵⁵ See 81 Fed. Reg. at 73,513.

³⁵⁶ See, e.g., Steve Mufson and Juliet Eilperin, EPA chief Pruitt met with many corporate execs. Then he made decisions in their favor. Washington Post (Sept. 23, 2017), https://www.washingtonpost.com/news/energy-environment/wp/2017/09/22/epa-chief-pruitt-met-with-many-corporate-execs-shortly-before-making-decisions-in-their-favor/?utm_term=.77cbee5cf92f; see also EPA, Calendar for Scott Pruitt, Administrator, available at <https://www.epa.gov/senior-leaders-calendars/calendar-scott-pruitt-administrator>.

³⁵⁷ See CAA section 307(d)(3) (“[a]ll data [and] information . . . on which the proposed rule relies shall be included in the docket on the date of publication of the proposed rule”).

equipment.³⁵⁸ Based upon what is known, those tests departed egregiously from proper testing protocols, and simply do not support the conclusion.³⁵⁹ see pp. --, *Infra*. But EPA has also failed to release basic information about the test, even though EPA invoked it in the proposal as ostensibly having called into question EPA's extensive prior finding that harmful emissions from glider vehicles, including emissions of NOx and PM, are extremely high, and many times the rate of emissions from new trucks meeting current emissions standards. This failure to produce all information concerning the Tennessee Tech study and EPA's analyses of it is unlawful,³⁶⁰ and precludes the public from having a full and fair opportunity to comment on the proposed repeal.³⁶¹

At the same time, EPA's NVFEL laboratory itself has tested two of Fitzgerald's glider vehicles.³⁶² The test results indicate that EPA's initial estimates of emissions — that emissions of glider vehicles would 20-40 times greater than freight trucks with new engines — in fact underestimated glider emissions. Based on the testing, measured PM emissions were as much as 450 times higher than those of current engines.³⁶³ Yet EPA issued the proposal invoking the dubious Tennessee Tech results, without awaiting the results of its own renewed testing.

The unusual circumstances of this rulemaking show the extreme irregularity of EPA's process. The belated disinterment of an issue that no party even sought to raise in the D.C. Circuit challenges to the Phase 2 Standards; the non-docketed meeting between the Administrator and a private company that is the Proposed Rule's principal beneficiary, followed months later by an extremely late "reconsideration" request; EPA's invocation in the proposal of a facially dubious, methodologically opaque, industry-funded study to propose repeal even before awaiting the results of EPA's own emissions tests; and the agency's failure even to consider the impact of the decision for public health or the integrity of the entire program for heavy-duty vehicles, all strongly suggest that this is not a decision being made on the merits. The basic irrationality of the proposed action – rolling back settled (and judicially unchallenged) regulations which rest upon EPA's clear statutory authority, addressing vehicles that present almost unequalled hazards to human health among all mobile sources, further suggests that this decision is not based upon the statutory and evidentiary merits. These circumstances instead paint a picture of an agency rewarding a particular private interest after successful lobbying of the Administrator in a private meeting.³⁶⁴ That is not a valid basis for administrative action. Nor is Administrator Pruitt's

³⁵⁸ 82 Fed. Reg. 53,444.

³⁵⁹ See Section 1(f)

³⁶⁰ See 42 U.S.C. 7607(d)(3) provides that the statement of basis and purpose for a proposed rule "shall include" among other things "(A) the factual data on which the proposed rule is based," and "(B) the methodology used in obtaining the data and in analyzing the data" and requires that "All data, information, and documents referred to in this paragraph on which the proposed rule relies shall be included in the docket on the date of publication of the proposed rule."

³⁶¹ See Section VII.

³⁶² See Section XX.

³⁶³ See EPA testing memo (operations under transient conditions).

³⁶⁴ See, e.g., *Natural Res. Def. Council, Inc. v. Sec. Exch. Comm'n.*, 606 F.2d 1031, 1049 n. 23 (D.C.Cir.1979) (noting that "presumption of agency regularity ... is rebutted," when "the agency has demonstrated undue bias towards particular private interests") (citing *Central Florida Enterprises, Inc. v. FCC*, 598 F.2d 37 (1978)).

interest in reversing policies of the prior administration, standing alone, a valid rationale for creating a major public health risk from unlimited glider vehicle pollution.³⁶⁵

X. Claims of GHG and recycling benefits are unsupported and incorrect

The proposal requests comments on purported GHG and recycling benefits from glider vehicles—backhandedly suggesting that glider vehicles have GHG benefits as compared to new, modern vehicles because of greater fuel efficiency.³⁶⁶ First, any claimed benefits are minor in scale to the enormous public health consequences of this proposal, which properly should be the main focus in this rulemaking. Moreover, these claimed benefits are not supported by any record evidence—and in many cases are clearly contradicted by the record.

First of all, the primary issue here is criteria pollutant emissions. The record demonstrates that criteria pollution emissions from glider vehicles are many multiple times higher than freight trucks with modern controls.³⁶⁷ Assertions that glider vehicles have GHG or recycling benefits have only been made generally in the record; no claim has been made, let alone with substantiation, that these alleged benefits would counterbalance the health harms from glider vehicles' criteria emissions.³⁶⁸

EPA's most recent memo into the record appropriately rejects these asserted benefits. EPA's economic analysis for this proposal notes that "EPA has not verified these claims" with respect to fuel efficiency of uncontrolled gliders.³⁶⁹ The agency further noted that, if the proposal is finalized, glider manufacturers will no longer need to incorporate Phase 2 fuel saving technologies, such that any alleged fuel efficiency benefit would be offset.³⁷⁰ The agency concluded that "[t]o the extent glider engines may have a fuel efficiency advantage over current newly manufactured engines, any such advantage for glider vehicles is likely to decrease in the future."³⁷¹

EPA also properly rejected these assertions in the 2016 Phase 2 rulemaking: EPA concluded that glider vehicles are likely less fuel efficient as compared to trucks with engines meeting the Phase 1 MY 2017 engine standard,³⁷² and freight trucks, which will meet the Phase 2 Standards in 2021, will necessarily provide even greater fuel efficiency advantages.³⁷³ More recently, EPA's new test results found that the two glider vehicles had marginally lower CO₂ emissions as

³⁶⁵ See *N.C. Growers, Inc. v. United Farm Workers*, 702 F.3d 755, xxx (4th Cir. 2012) (Wilkinson, J., concurring) ("Changes in course ... cannot be solely a matter of political winds and currents. ... Otherwise, government becomes a matter of whim and caprice of the bureaucracy, and regulated entities will have no assurances that business planning on today's rules will not be arbitrarily upset tomorrow.").

³⁶⁶ 82 Fed. Reg. 53,444, referring to the petition for reconsideration

³⁶⁷ See Section I.

³⁶⁸ See, e.g., HDP2 Response to Comments pg. 1843.

³⁶⁹ U.S. Environmental Protection Agency, Memorandum: Assessment of Economic Factors Associated with the Proposed Repeal of Emission Requirements for Glider Vehicles, Glider Engines, and Glider Kits, Nov. 16, 2017, pg. 2, EPA-HQ-OAR-2014-0827-2407.

³⁷⁰ *Id.*

³⁷¹ *Id.* at 3.

³⁷² HDP2 Response to Comments pg. 1878-79, 1885.

³⁷³ HDP2 Response to Comments pp. 1878-79.

compared to the tested new 2014 and 2015 vehicles.³⁷⁴ To the extent that glider vehicles currently offer any fuel efficiency or GHG benefits, these benefits will erode and disappear because gliders, under this proposal, would not be mandated to achieve the current and upcoming GHG improvements under the Phase 1 and 2 Standards. MY 2017 and later wholly new vehicles will continue to be more efficient thanks to EPA's Phase 1 and 2 Standards. These GHG standards will lead to significant per-vehicle fuel savings and GHG reductions. The Phase 2 Standards for tractors are projected to reduce fuel consumption and GHG emissions by 13% in MY2021, 20% in MY2024, and 25% in MY 2027 compared to 2017 tractors, with corresponding, incremental increases in intervening years.³⁷⁵

Finally, any alleged GHG benefit is also outweighed by the concern EPA noted in its 2016 Final Rule, that glider vehicles would not have important emission controls for hydrofluorocarbons, a highly potent category of greenhouse gases—specifically, gliders would not comply with air conditioning leakage controls included in the Phase 1 rules.³⁷⁶

The proposal also includes assertions that glider vehicles are more fuel-efficient than the old trucks they are replacing because they have improved aerodynamics and low rolling resistance tires. Again, the ability to make glider vehicles with these efficiency improvements is not impacted by the current provisions. The phase 2 final rule simply requires that the engines installed in these more efficient glider vehicles be held to modern emissions standards to protect public health and the environment. And as discussed above, glider vehicles are purchased as an alternative to new, compliant freight trucks, not as alternative to purchasing old vehicles that have already reached the end of their useful life.³⁷⁷

In sum, in its new proposal, EPA provides no meaningful consideration, evidence, or analysis to justify setting aside its 2016 findings or its new testing, all of which firmly rebuts any meaningful GHG benefits from glider vehicles.

Arguments related to the recycling benefits of gliders are similarly unsubstantiated and unconvincing. EPA noted in its 2016 rulemaking that commenters “did not provide an analysis for EPA to evaluate” to substantiate general claims that remanufacturing required less energy as compared to new freight truck manufacturing³⁷⁸; in its new proposal, EPA now includes a similarly unsubstantiated claim that glider vehicles reuse approximately 4,000 pounds of cast steel, which may avoid NOx emissions.³⁷⁹ Neither the agency nor the petition for reconsideration

³⁷⁴ EPA, “Chassis Dynamometer Testing of Two Recent Model Year Heavy-Duty On-Highway Diesel Glider Vehicles,” (November 20, 2017). See: <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-2417>

³⁷⁵ 81 Fed. Reg. at 73,482. The Phase 1 program when fully implemented by 2017, will result in approximately a 15-32% improvement in fuel consumption for Class 7 and 8 combination tractors compared to a 2010 tractor. 81 Fed. Reg. at 73,503-04. In addition, the Phase 2 standards will provide an improvement in fuel efficiency of 19% - 24% relative to a 2017 tractor, yielding a total combined improvement of 34 to 57 percent relative to a 2010 tractor. *Id.* As manufacturers continue to meet the Phase 1 and 2 standards, covered freight trucks will continue to gain improvements in aerodynamics, low rolling resistant tires, weight reduction, improved transmissions, improved air handling, and other improvements. Greenhouse Gas Emission Standards and Fuel Efficiency for Medium- and Heavy-Duty Engines and Vehicles, 78 Fed. Reg. at 57201-57221 (September 15, 2011).

³⁷⁶ HDP2 Response to Comments pg. 1877.

³⁷⁷ See Section XX.

³⁷⁸ HDP2 Response to Comments, pg. 1877.

³⁷⁹ 82 Fed. Reg. 53,444.

provides documentation or quantification of the alleged NOx emissions avoided or any other pollution benefit—let alone any documentation that the emissions avoided would match the enormous scale of NOx pollution that would certainly be emitted by continued unlimited sale of uncontrolled glider vehicles. Nor do they grapple with important context indicating that if engines were not reused in gliders, they would be recycled.: steel is already the most recycled material in the U.S.³⁸⁰; steel recycling rates as of 2012 stood at 88% overall, with a 92.5% recycling rate for automobiles.³⁸¹ The unsubstantiated claim regarding gliders’ recycling benefits is not a valid reason to also allow these vehicles to pollute indiscriminately.

XI. The Proposed Rule creates an unlevel playing field, allowing a subset of the freight industry to market their exemption from life-saving pollution protections.

The Proposed Rule will create a market distortion in the freight truck industry, establishing a pollution loophole at the expense of public health in communities across the country as well as truck manufacturers and dealers that have responsibly invested in selling trucks equipped with modern pollution controls.

The Phase 2 Standards do not unfairly burden the glider industry; in that rulemaking, EPA analyzed and considered the effect the gliders provision would have on small glider-producing businesses.³⁸² In contrast, EPA performed no such small business analysis with respect to the impact of this Proposed Rule, and accordingly failed to consider its negative potential impacts for small businesses that have invested in pollution-controlled freight truck sales and maintenance.

There is no substantiation in the record demonstrating that sales of new glider vehicles and wholly new trucks will decrease overall if the Phase 2 glider provisions go into effect; even if there was, the benefits of the Phase 2 glider provisions dramatically outweigh any costs, and the program carefully considered and accommodated small business concerns.

Administrator Pruitt has stated repeatedly that EPA should not be in the position of picking winners and losers in regulating pollution.³⁸³ This proposal would do just that: allowing the unrestricted use of highly polluting diesel engines to benefit a chosen few glider producers, at the expense of Americans’ health and safety, and at the further expense of the heavy-duty truck and engine industry, supply chain, and employees.

³⁸⁰ Institute of Scrap Recycling Industries, *The Scrap Recycling Industry: Iron and Steel*, 2016 (accessed Dec. 30, 2017), <http://www.isri.org/docs/default-source/recycling-industry/fact-sheet---iron-and-steel.pdf>.

³⁸¹ SteelWorks, *Steel is the World’s Most Recycled Material*, 2017 (accessed Dec. 30, 2017), <http://www.steel.org/sustainability/steel-recycling.aspx>.

³⁸² See HDP2 Rule, 81 Fed. Reg. at 73,941-42.

³⁸³ See e.g. Energywire: Friday, April 21, 2017 (recounting Administrator Pruitt’s speech at Thomas Hill Missouri facility). See e.g., Tom DiChristopher, *New EPA chief plans ‘humble’ approach to regulating CO2 emissions*, CNBC (Mar. 28, 2017), <https://www.cnbc.com/2017/03/28/epa-chief-scott-pruitt-signals-less-aggressive-response-to-emissions.html> (“Pruitt said the EPA would not issue rules that pick winners and losers.”); Jeffrey Tomich, *Pruitt says Trump’s EPA won’t pick ‘winners and losers,’* E&E NEWS (Apr. 21, 2017), <https://www.eenews.net/stories/1060053390>; Daniella Diaz, *Pruitt announces withdrawal of Clean Power Plan*, CNN (Oct. 10, 2017), <http://www.cnn.com/2017/10/09/politics/environmental-protection-agency-scott-pruitt-clean-power-plan/index.html>.

a. The proposal will disadvantage mainstream truck dealers and manufacturers that are installing pollution controls, creating a competitive advantage for glider manufacturers based upon their ability to impose the costs of their vehicles' operations on the public.

This Proposed Rule would unfairly advantage the glider industry by exempting them from Clean Air Act safeguards that have enormous benefits for public health. The glider industry would reap all the upside, while communities across the country would bear the burden of substantially increased pollution.

Glider vehicles compete with new trucks. EPA's economic assessment for this Proposed Rule concluded that "EPA agrees that either strengthening or weakening the requirements for glider vehicles could potentially impact the competitive balance in the heavy-duty truck market, both advantaging and disadvantaging small businesses."³⁸⁴ As discussed in greater detail in section 1(h), the notion that the alternative to glider vehicles is an old freight truck is misplaced. Furthermore, any alleged price advantage for gliders would be a classic externality: the cost of pollution control is externalized to those exposed to glider vehicle pollution. This type of externalizing of vehicular pollution costs is precisely what Title 2 of the Act is designed to end.³⁸⁵ This externality—this loophole—creates a windfall for the glider industry that Americans all pay for by undermining the tremendous progress that has been achieved in addressing freight truck pollution.

Moreover, because glider sales compete against sales of fully compliant new trucks, the result would be a zero-sum impact on the overall freight truck industry, with increased sales and jobs in the glider industry coming at the expense of businesses all along the value chain of the industry that have responsibly invested in pollution control.³⁸⁶ EPA acknowledged as much in the economic analysis that the agency included in the record as part of this rulemaking.³⁸⁷ The record indicates that new and used truck dealers and truck parts sellers are losing business to glider sellers and if EPA adopts the proposal, it could drive those dealers to enter the glider market just to remain competitive.³⁸⁸ This, in turn, would result in even more drastic increases in air

³⁸⁴ U.S. Environmental Protection Agency, Memorandum: Assessment of Economic Factors Associated with the Proposed Repeal of Emission Requirements for Glider Vehicles, Glider Engines, and Glider Kits, at 2, EPA-HQ-OAR-2014-0827-2407 (Nov. 16, 2017).

³⁸⁵ See *supra* Section XX.

³⁸⁶ Indeed, evidence of the jobs at risk from the Proposed Rule suggest that, if anything, the Proposed Rule would result in net job *losses*; EPA has arbitrarily failed to consider this possibility. See Section XI(a)(iii).

³⁸⁷ U.S. Environmental Protection Agency, Assessment of Economic Factors Associated with the Proposed Repeal of Emission Requirements for Glider Vehicles, Glider Engines, and Glider Kits, (Nov. 16, 2017.), EPA-HQ-OAR-2014-0827-2407 ("EPA agrees that either strengthening or weakening the requirements for glider vehicles could potentially impact the competitive balance in the heavy-duty truck market, both advantaging and disadvantaging certain small businesses."), <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-2407>.

³⁸⁸ Testimony of John Calvin Doub, TMI Truck & Equipment, at EPA Hearing (Dec. 4, 2017) (explaining that the profit margin is so big on gliders, if you change the rule, you can expect to see other industry players jumping in), <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-4285>. See also Testimony of Ken Davis, Bruckner Truck Sales, EPA-HQ-OAR-2014-0827-4327 (Nov. 5, 2017), available at <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-4327> ("I have lost sales to glider vehicles and

pollution, resulting in further increases in the negative health effects described in Part I of this comment, and seriously undermining Clean Air Act emissions standards for all heavy-duty vehicles.

- i. The glider industry has dramatically expanded due to a pollution loophole.

Dramatic growth in glider vehicle production occurred due to a loophole in pollution safeguards, which glider manufacturers have taken advantage of to sell vehicles not in compliance with current pollution safeguards.³⁸⁹ The failure to meet modern pollution standards is advertised as an advantage for these freight trucks. One glider company's website advertises several advantages of a glider vehicle "compared to a factory truck," as including "[n]o DEF or EGR."³⁹⁰ Another advertises that its glider vehicles contain "EPA 98-04 engines only," meaning that the engines lack the most current pollution control technology.³⁹¹ A trade press article describes some of the advantages of a glider vehicle as follows:

The tractor's Detroit Reliabilt Series 60 diesel doesn't have exhaust-gas recirculation, because the engine must meet EPA emissions limits for the period it was originally built, 1998-2002, not the '02/'04 regulations where EGR began. And its exhaust system doesn't need a bulky diesel particulate filter or the diesel exhaust fluid required with selective catalytic reduction, which debuted in 2007 and 2010, respectively.³⁹²

Any claims that uncontrolled glider vehicles provide lower maintenance costs are speculative and not substantiated in the record. EPA noted in its economic analysis of the Proposed Rule that "EPA has not verified these claims" and further that "to the extent engine manufacturers will

it negatively impacts my business. As an example in the Tulsa area, we have a fleet running nationwide that is currently operating eight glider kit trucks with engines that don't meet current emissions standards. Our new trucks were considered for purchase by company ownership but we ultimately lost the sales due to the above referenced negative factors."); Testimony of Justin Keck, Grande Truck Center, EPA-HQ-OAR-2014-0827-4384 (Jan. 2, 2018), available at <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-4384> (Citing a customer who had purchased 40 trucks over the past 5 years but plans to switch to buying gliders as long as EPA regulations allow it); Testimony of Matthew E. Niebauer, Legacy Truck Centers, Inc., EPA-HQ-OAR-2014-0827-4378 (Jan. 2, 2018), available at <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-4378> ("We have numerous customers that had previously purchased new trucks from us but have switched to buying 'Glider kits' in recent years for the sole purpose of avoiding current emissions technology.).

³⁸⁹ See Int'l Council on Clean Transportation, Comment on HDP2 Proposed Rule at 13 (Oct. 1, 2015), available at <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-1180>; FLEETOWNER, *Schneider offers glider kit trucks for sale* (Oct. 29, 2015), <http://www.fleetowner.com/equipment/schneider-offers-glider-kit-trucks-sale>.

³⁹⁰ Fitzgerald Glider Kits, *What is a Glider Kit?*, <https://www.fitzgeraldgliderkits.com/what-is-a-glider-kit> (last accessed Jan. 3, 2018). DEF is diesel exhaust fluid, which is used in control technology that removes harmful NOx emissions from diesel engines and is required by 2010 emissions standards; and exhaust gas recirculation ("EGR") is another NOx reduction technology. See Discover DEF, *What is DEF?*, <http://www.discoverdef.com/def-overview> (last accessed Jan. 3, 2018).

³⁹¹ Harrison Truck Centers, Glider Kits, <http://www.htctrucks.com/index.php/sales/harrison-truck-centers-glider-kits> (last accessed Jan. 3, 2018).

³⁹² Tom Berg, *Test Drive: Clarke-APG Dual-Fuel Glider*, Truckinginfo (Apr. 2014), <http://www.truckinginfo.com/article/story/2014/05/test-drive-clarke-apg-dual-fuel-glider.aspx>.

continue to improve the reliability...of their engines, as might be expected, any operating cost advantage for glider vehicles would likely decrease in the future.”³⁹³

Separately, the record indicates that glider vehicle buyers in some cases avoid a 12% federal excise tax, which is used to fund the maintenance of our national highway system.³⁹⁴

ii. Expanding sales of glider vehicles heightens the public health threat posed by this proposal.

Record evidence supports the conclusion that glider sales are eating into sales of fully compliant freight trucks that meet modern pollution standards—indicating that even more serious pollution burdens could stem from finalizing this proposal. One freight truck dealership group—consisting of seven locations across five states—estimates that it loses approximately 25% of annual new truck retail sales volume to glider kits.³⁹⁵ Another truck dealer, testifying at the December 4, 2017 EPA hearing on this proposal, expressed concern that an unintended consequence of this rule could be a major increase in the gliders market share compared to fully compliant new and used trucks.³⁹⁶ He estimated that gliders could grow to occupy 30% of the freight truck market.³⁹⁷ This, of course, would mean that 30% of freight trucks on our roads and highways would be able to emit unlimited amounts of pollution, and would in fact emit far in excess of modern pollution control standards.

Robert Nuss of Nuss Truck and Equipment, a truck and equipment dealership that sells freight trucks equipped with modern pollution controls from eight locations in Minnesota and Wisconsin, summarized the problem as follows:

We have lost new truck sales to glider kits and it negatively impacts our business. We have quoted new trucks to small fleets in our markets that have elected to purchase glider kits to avoid emissions standards. They are not furnishing the components from their own worn out or wrecked trucks, they are just avoiding emissions. We know that these trucks owners are within their right to purchase

³⁹³ U.S. Environmental Protection Agency, Memorandum: Assessment of Economic Factors Associated with the Proposed Repeal of Emission Requirements for Glider Vehicles, Glider Engines, and Glider Kits at 2 (Nov. 16, 2017), EPA-HQ-OAR-2014-0827-2407, <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-2407>.

³⁹⁴ Allstate Peterbilt Group, *Why are commercial truck glider kits popular?* (June 29, 2017), <http://www.allstatepeterbilt.com/blog/why-are-commercial-truck-glider-kits-popular>; see Testimony of Michael McMahon, McMahon Truck Centers, at EPA Hearing (Dec. 4, 2017), available at <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-2464> (explaining that “[t]he topic of FET [federal excise tax] on Glider Kits is murky at best. . . . As Glider Kits replace New Truck sales, that’s all the less income going toward the repair of our aging US highway infrastructure.”).

³⁹⁵ Testimony of Michael McMahon, McMahon Truck Centers, at EPA Hearing (Dec. 4, 2017), available at <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-2464>.

³⁹⁶ Testimony of John Calvin Doub, TMI Truck & Equipment, at EPA Hearing (Dec. 4, 2017.), available at <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-4285>.

³⁹⁷ *Id.*

glider kits today, but we just want to level the playing field so that we can fairly compete.³⁹⁸

Glider vehicle sales have already been stretched beyond their original engine salvage intent, and with this proposal they have the potential to increasingly overtake the market—further exacerbating harmful pollution impacts, at the expense of public health and freight truck industry members that are complying with modern pollution control standards.

iii. The Proposed Rule puts jobs and economic activity at risk.

EPA does not point to any record evidence indicating that the advantages for the glider industry lead to an overall increase in economic activity; instead, ample record evidence suggests that this loophole for glider vehicles comes at the expense of jobs and sales related to fully compliant freight trucks.

The record suggests that sales of glider vehicles have harmed job growth in sales and maintenance of modern, fully compliant freight trucks. New trucks contain more advanced technology than glider trucks—including, of course, pollution control technology, superior fuel efficiency technology, as well as advanced safety features—which support well-paying jobs in freight truck maintenance and repair.³⁹⁹ Those jobs need highly skilled, highly trained workers, helping provide stability for American families through good and bad economic conditions.⁴⁰⁰ To the extent that glider assemblers increase their hiring, the record indicates they are taking jobs away from manufacturers and dealers of fully compliant new trucks.⁴⁰¹

In addition to the jobs affected directly through truck sales and manufacturing, the emission control technologies that keep our air clean also create domestic jobs, which are negatively affected by the burgeoning, minimal-technology glider vehicle market. The mobile source emission control industry as a whole is a major industry, responsible for nearly 300,000 jobs across North America, including jobs in nearly every state in the U.S.⁴⁰²

³⁹⁸ Comment of Robert Nuss, Nuss Truck & Equipment, on EPA Proposed Rule Repeal of Emissions Requirements for Glider Vehicles (Oct. 14, 2017), <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-2388>.

³⁹⁹ See Testimony of John Calvin Doub, TMI Truck & Equipment, at EPA Hearing (Dec. 4, 2017) (explaining that new truck technicians are being hurt by the glider business, because “glider kits are so behind the times that it is cheap and easy to fix them”), <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-4285>; Comment of Robert Nuss, Nuss Truck & Equipment, on EPA Proposed Rule Repeal of Emissions Requirements for Glider Vehicles (Oct. 14, 2017), <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-2388>.

⁴⁰⁰ Testimony of Michael McMahon, McMahon Truck Centers, at EPA Hearing (Dec. 4, 2017), available at <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-2464> (“Highly skilled, highly trained positions like these are good in both good and bad economies. In an upturn, these techs would command higher wages. In a downturn, their high level of training may translate across industries, if needed.”).

⁴⁰¹ See Comment of Robert Nuss, Nuss Truck & Equipment, on EPA Proposed Rule Repeal of Emissions Requirements for Glider Vehicles (Oct. 14, 2017), <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-2388>; see also HDP2 Rule RTC p. 1883 where EPA found that “jobs in the glider industry come at the expense of other jobs in the heavy duty industry.”

⁴⁰² Comment of Manufacturers of Emission Controls Association, on EPA Proposed Rule Repeal of Emissions Requirements for Glider Vehicles (Sept. 5, 2017), available at <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-2374>.

The proposed rule at issue here is also problematic for truck and engine manufacturers and fleets because it creates instability and uncertainty. Industry leaders are concerned that repealing the 2016 glider provision and reopening the loophole “could lead to an inconsistent patchwork of federal and state requirements.”⁴⁰³ Such instability makes it challenging for companies in the truck industry to make investment decisions.

Claims that overall negative economic impacts will occur if the Phase 2 gliders provision go into effect are unsubstantiated. The minimal economic assessment that EPA submitted into the record reached no conclusion on this topic, noting only that “EPA agrees that either strengthening or weakening the requirements for glider vehicles could potentially impact the competitive balance in the heavy-duty truck market, both advantaging and disadvantaging certain small businesses.”⁴⁰⁴

All of these problems are unaddressed in the proposal. This is legal error for failure to consider issues of direct relevance, as discussed in Section VII above.

iv. The freight truck industry predominately supports the Phase 2 Standards and has expressed concerns about this Proposed Rule.

During the public comment period leading up to the 2016 Phase 2 Standards, a broad range of freight truck industry stakeholders clearly expressed to EPA that they supported the gliders provisions. A compilation of their comments into the record is available in Appendix A. For example, GATR Truck Center, a truck dealership located in Iowa and Minnesota, stated: “The market availability of these noncompliant engines and vehicles poses an unfair competitive disadvantage to manufacturers that have undertaken the enormous effort and investment necessary to comply with all applicable emissions, fuel efficiency, and safety standards, and likewise an unfair competitive advantage to the dealer network representing those OEM’s.”⁴⁰⁵ Nuss Truck and Equipment similarly noted that, “The original intent of selling glider kits has moved from a rebuilding mechanism to now mainly evading diesel emissions EPA mandates.”⁴⁰⁶ Navistar, a truck manufacturer, expressed its support for the gliders provision of the rule, and even suggested that “the allowance is too high, and that gliders should either be limited to 200 per year or eliminated completely.”⁴⁰⁷ The freight truck industry engaged with EPA throughout

⁴⁰³ Testimony of Pat Quinn, Heavy Duty Leadership Group, at EPA Hearing (Dec. 4, 2017), *available at* <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-2468>.

⁴⁰⁴ U.S. Environmental Protection Agency, Memorandum: Assessment of Economic Factors Associated with the Proposed Repeal of Emission Requirements for Glider Vehicles, Glider Engines, and Glider Kits at 2 (Nov. 16, 2017), EPA-HQ-OAR-2014-0827-2407.

⁴⁰⁵ HDP2 Response to Comments at 1888; GATR Truck Center, Comment on HDP2 Proposed Rule (Sept. 8, 2015), *available at* <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-1010>.

⁴⁰⁶ Nuss Truck & Equipment, Comment on HDP2 Proposed Rule, (Aug. 31, 2015), *available at* <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-0922>.

⁴⁰⁷ HDP2 Response to Comments at 1897; Navistar, Inc., Comment on HDP2 Proposed Rule (Oct. 1, 2015), *available at* <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-1218>.

the rulemaking and was ultimately supportive of the 2016 Phase 2 Standards, including the gliders provisions.⁴⁰⁸

Meanwhile, many key leaders in the freight truck industry have already expressed concerns about the Proposed Rule. The American Trucking Association, Engine Manufacturers Association, Manufacturers of Emission Controls Association, Heavy Duty Fuel Efficiency Leadership Group (a consortium of the largest fleet owners), and Volvo all expressed concerns in their December 4, 2017 Public Hearing statements.⁴⁰⁹

b. EPA carefully considered the impact to the glider industry and small businesses in the Phase 2 Standards.

In the 2016 Phase 2 Standards, EPA carefully analyzed how the glider industry and small businesses would be affected by a rule requiring glider vehicles to meet the same pollution standards as all other Class 8 freight trucks: it assessed the history of the glider industry; convened a Small Business Advocacy Review Panel;⁴¹⁰ prepared a proposed and final regulatory flexibility analysis;⁴¹¹ received extensive public input; and responded with modifications to the final rule to take into account the concerns of small businesses and the glider industry, while appropriately weighing the need to protect public health.⁴¹² Under the 2016 Final Phase 2 Standards, glider vehicles must contain engines meeting the same pollution standards Congress mandated for all other heavy duty diesel engines — standards reflecting “the greatest degree of emission reduction achievable” through the application of available, cost-effective technology—

⁴⁰⁸ See, e.g., Testimony of Pat Quinn, Heavy Duty Leadership Group, at EPA Hearing (Dec. 4, 2017), available at <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-2468>, (“The Leadership Group’s members worked very closely with EPA in the development of the Phase 2 Rule, providing technical input which we believe helped to craft a sound rule which the Group strongly endorsed in its final form.”); see also Appendix A (listing supportive comments specific to the gliders provisions); Environmental Defense Fund, Broad Support Across America: Phase II Greenhouse Gas and Fuel Economy Standards for Freight Trucks and Buses (listing supportive comments related to the Phase 2 standards in general) (last accessed Dec. 30, 2017), available at https://www.edf.org/sites/default/files/content/positive_quotes_on_final_hd_phase_2_rulemaking_10.24.16_final.pdf.

⁴⁰⁹ Testimony of Kedzie Glen, American Trucking Association, at EPA Hearing (Dec. 4, 2017), available at <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-4292>; Testimony of Jed Mandel, Truck and Engine Manufacturers Association, at EPA Hearing (Dec. 4, 2017), available at <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-4299>; Testimony of Michael Geller, Manufacturers of Emission Controls Association, at EPA Hearing (Dec. 4, 2017), available at <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-4288>; Testimony of Pat Quinn, Heavy-Duty Fuel Efficiency Leadership Group, at EPA Hearing (Dec. 4, 2017), available at <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-4310>; Testimony of Susan Alt, Volvo Group North America, at EPA Hearing (Dec. 4, 2017), available at <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-4273>.

⁴¹⁰ HDP2 Rule, 81 Fed. Reg. at 73,962.

⁴¹¹ HDP2 Rule, 81 Fed. Reg. at 73,962; HDP2 Rule Regulatory Impact Analysis, Chapter 12, EPA-HQ-OAR-2014-0827.

⁴¹² HDP2 Rule, 81 Fed. Reg. at 73,941-42.

with certain limited exceptions and flexibilities.⁴¹³ The agency’s thorough process carefully considered and included provisions in the Phase 2 Standards that were responsive to concerns raised.

Historically, the glider vehicle industry existed primarily to reclaim powertrains from wrecked truck bodies. But the industry expanded rapidly after new pollution standards were phased in⁴¹⁴ as a method to avoid compliance with the health-protective standards.⁴¹⁵ In the early 2000s, just a few hundred glider vehicles were produced annually, but EPA estimates that production surged to over 10,000 per year by 2016.⁴¹⁶ As glider production has scaled up, glider vehicles for the most part are no longer made from powertrains salvaged from wrecked trucks, but rather are mass-produced with donor components from any possible source.⁴¹⁷ EPA distinguished between these two eras of gliders in the final 2016 rule, explaining that the glider provisions sought a “transition to a long-term program in which manufacture of glider vehicles better reflects the original reason manufacturers began to offer these vehicles—to allow the reuse of relatively new powertrains from damaged vehicles.”⁴¹⁸

The Phase 2 Standards built in a number of flexibilities for glider vehicle manufacturers, with a particular focus on accommodating small businesses. For the year 2017, the rule allowed small businesses to produce glider vehicles up to a production limit, set at “the manufacturer’s highest annual production of glider kits and glider vehicles for any year from 2010 to 2014.”⁴¹⁹ The long-term program begins on January 1, 2018, and contains multiple “transitional flexibilities.” Small businesses may produce up to 300 glider vehicles—or are capped at their highest annual production from 2010 to 2014, if that amount is less than 300—that are not in compliance with the engine and vehicle standards.⁴²⁰ Model year 2010 and later engines installed in glider vehicles do not have to satisfy the Phase 1 GHG engine standards.⁴²¹ Finally, as mentioned previously, rebuilt engines may be installed without meeting the standards for the year of glider vehicle assembly if the engines are “within their regulatory useful life.”⁴²² These modifications and flexibilities were responsive to and reflected the input the agency received through its small business panel and regulatory flexibility analysis.

⁴¹³ CAA § 202(a)(3)(A).

⁴¹⁴ See HDP2 Rule, 81 Fed. Reg. at 73,941-43.

⁴¹⁵ Tom Berg, *The Return of the Glider*, TRUCKINGINFO, Apr. 2013, <http://www.truckinginfo.com/channel/equipment/article/story/2013/04/the-return-of-the-glider.aspx> (“Growth in gliders in recent years was due to the FET avoidance, poor fuel economy with EPA 2007-spec engines, and then the high cost of EPA 2010 emissions requirements, Hames says.”).

⁴¹⁶ HDP2 Rule, 81 Fed. Reg. at 73,943.

⁴¹⁷ See Testimony of Susan Alt, Volvo, at EPA Hearing (Dec. 4, 2017), available at <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-2462>; Jim Park, *Is There A Glider Kit in Your Future?*, TRUCKINGINFO (July 2011), <http://www.truckinginfo.com/channel/equipment/article/story/2011/07/is-there-a-glider-kit-in-your-future.aspx> (explaining that two out of three major powertrain components must come from the same donor truck, which means glider manufacturers can just substitute parts, such as a rebuilt engine, from another truck).

⁴¹⁸ HDP2 Rule, 81 Fed. Reg. at 73,941.

⁴¹⁹ HDP2 Rule, 81 Fed. Reg. at 73,941-42.

⁴²⁰ HDP2 Rule, 81 Fed. Reg. at 73,942.

⁴²¹ HDP2 Rule, 81 Fed. Reg. at 73,942.

⁴²² HDP2 Rule, 81 Fed. Reg. at 73,942.

Accordingly, the premise of the Proposed Rule is misplaced because the standards and production cap in the gliders provision of the Phase 2 Standards do not unduly burden the glider industry, particularly when compared to the disproportionate public health threat posed by uncontrolled glider vehicle emissions. Tommy Fitzgerald, Jr. of Fitzgerald Glider Kits, the largest glider vehicle producer in the country, has stated that his company is “set up to make a profit at 300 [glider vehicles] a year.”⁴²³ As EPA explained: “It is important to emphasize that EPA is not banning gliders. Rather, as described below, EPA is requiring that glider vehicles meet the standards that all other new trucks are required to meet, unless eligible for certain limited exemptions that provide flexibility for small businesses and for certain other specific applications.”⁴²⁴ The 2016 rule restores glider production standards and volume to levels “consistent with the original purpose of glider kits and vehicles.”⁴²⁵

Moreover, as EPA noted in the Phase 2 Standards, many truck dealers and manufacturers submitted comments to the agency to state their support for the glider provisions.⁴²⁶

Meanwhile, EPA performed no small business regulatory flexibility analysis and convened no small business panel with respect to the impact of this Proposed Rule, another absence that renders this rulemaking arbitrary and capricious.⁴²⁷ In fact, its proposal did not include any discussion or consideration related to this rulemaking’s negative potential impacts for small businesses like freight truck dealerships that have properly invested in emission-controlling freight truck sales and maintenance.⁴²⁸

XII. EPA Should Not Otherwise Weaken the Glider Provisions

As discussed in detail above, the use of each glider vehicle with a noncompliant, uncontrolled engine threatens public health. Accordingly, EPA’s request for comment on options to weaken the Phase 2 glider provisions is wrongheaded: the agency should reject any increase in the cap on sale of uncontrolled glider vehicles as well as any delay in implementation of these protections. As we describe below, neither option can be justified in light of EPA’s duty to protect the public and the extensive record of health harms from uncontrolled glider vehicles.

Furthermore, EPA cannot move ahead with finalizing any such action without first issuing a new proposal that would lay out any reasoning and analysis used to justify any such action. EPA has a duty under the law to provide notice to the public and opportunity to comment on the reasoning

⁴²³ Tom Berg, *The Return of the Glider*, TRUCKINGINFO (April/Apr. 2013), <http://www.truckinginfo.com/channel/equipment/article/story/2013/04/the-return-of-the-glider.aspx>.

⁴²⁴ HDP2 Rule, 81 Fed. Reg. at 73,942.

⁴²⁵ HDP2 Rule, 81 Fed. Reg. at 73,942.

⁴²⁶ See HDP2 Response to Comments at 1872, 1897, 1899 (summarizing comments of Cummins, Navistar, Nuss); see also Appendix A (summarizing freight industry comments).

⁴²⁷ 82 Fed. Reg. at 53,448.

⁴²⁸ See Testimony of Robert Nuss, Nuss Truck & Equipment, at EPA Hearing (Dec. 4, 2017), available at <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-4307>; Testimony of Michael McMahon, McMahon Truck Centers, at EPA Hearing (Dec. 4, 2017), available at <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-2464>.

and basis for a rulemaking.⁴²⁹ EPA’s current Proposed Rule mentions the options for weakening the glider provisions in four sparse sentences, without any justification, reasoning, or analysis to support either option.⁴³⁰ EPA’s Proposed Rule does not provide sufficient notice, such that any effort to finalize either action without a new proposal would be unlawful.

a. EPA Must Maintain the Current Compliance Date for Glider Vehicles

The glider vehicle provisions of the Phase 2 Standards include a transitional program for the 2017 calendar year and a long-term program that went into effect on January 1, 2018, with certain built-in transitional flexibilities to accommodate small businesses.⁴³¹

EPA must maintain the January 1, 2018 compliance date for the long-term program. EPA concluded in the Phase 2 rulemaking that any delay in the compliance date could result in significant pre-buys of highly polluting glider vehicles, which would have detrimental consequences for public health.⁴³² A pre-buy occurs when market participants—here, fleets and independent drivers—purchase a significant volume of a product that will imminently be subject to a new regulation, shortly before that regulation is implemented.⁴³³ EPA acted in the Phase 2 Standards to address this serious concern by requiring transitional compliance starting January 1, 2017, and full compliance starting January 1, 2018. This carefully considered decision is well supported by the record and should not be undone.

During the Phase 2 rulemaking, freight truck manufacturers emphasized their concern that a pre-buy would occur since EPA was looking to close the gliders loophole. Volvo Trucking North America stated during the notice and comment period that because “pre-buys are a known consequence of new regulatory requirements . . . EPA need not exacerbate them by providing a window for the unfettered manufacture of non-compliant vehicles.”⁴³⁴ The company further urged EPA to “adopt additional stringent measures to prevent the stockpiling of glider vehicles after new standards take effect.”⁴³⁵

EPA addressed these concerns in the Phase 2 Standards by initially production of uncontrolled glider vehicles beginning on January 1, 2017, with longer-term limits becoming effective January 1, 2018. The agency stated “that by finalizing restrictions for 2018 in this rule we risk causing a pre-buy scenario where production surges further in 2017. This would be both very harmful to the environment and disruptive to the market. To avoid these problems . . . we are

⁴²⁹ See Section VII(d).

⁴³⁰ Proposed Rule, 82 Fed. Reg. at 53,447.

⁴³¹ HDP2 Rule, 81 Fed. Reg. at 73518.

⁴³² EPA RTC Section 14, Appendix A, pg. 1960-68.

⁴³³ See Katherine Rittenhouse & Matthew Zaragoza-Watkins, “Anticipation and Environmental Regulation,” MIT Center for Energy and Environmental Policy Research, Working Paper, CEEPR WP 2017-004 at 2 (February 2017), available at <http://ceepr.mit.edu/files/papers/2017-004.pdf>.

⁴³⁴ HDP2 RTC at 1870-71.

⁴³⁵ HDP2 RTC at 1870-71.

finalizing a glider kit and glider vehicle production limit for calendar year 2017 for glider vehicles using high polluting engines.”⁴³⁶

Recognizing the need to avoid pre-buys of super-polluting glider vehicles, EPA took responsible action by moving up the compliance deadline, which benefits the industry as a whole.⁴³⁷ There is no justification for the agency to back away from this decision now: the record shows that the public health consequences would be even more severe.

b. If Any Changes Are Made, EPA Should Lower the Glider Vehicle Production Limit

EPA should not increase the glider vehicle production cap for small businesses that was implemented in the Phase 2 Standards. That rule, which generally requires all glider vehicles to comply with the same pollution protections as other new heavy-duty vehicles, contains a provision allowing each glider manufacturer to produce a limited number of gliders—300 or their 2010-2014 highest annual production volume, whichever is smaller—without meeting engine or vehicle standards.⁴³⁸ This cap was intended to help small businesses transition into full compliance with the new standards.

The production cap on uncontrolled glider vehicles is amply supported by the record, the product of a multi-faceted small business engagement effort, and not overly burdensome for glider producers. EPA carefully analyzed how glider dealers would be affected by a rule limiting glider production: it assessed the history of the glider industry, received extensive public input, and responded with modifications to the final rule to ensure fairness to small businesses. The 2016 Phase 2 Standards set a cap on uncontrolled glider vehicle production in order to “transition to a long-term program in which manufacture of glider vehicles better reflects the original reason manufacturers began to offer these vehicles—to allow the reuse of relatively new powertrains from damaged vehicles.”⁴³⁹ Thus, the rule is targeted to limit exploitation of a loophole to avoid installing health-saving technology on new freight trucks.

An increase in the cap on production of uncontrolled glider vehicles would be deeply damaging for public health. In the Phase 2 Standards, EPA limited the number of glider vehicles that can be produced with the understanding that an enormous amount of pollution could be avoided by limiting “even a fraction of these glider vehicles.”⁴⁴⁰ EPA estimated in the Phase 2 Standards that glider vehicles “have NOx and PM emissions 20–40 times higher than current engines,” resulting in “significantly higher in-use emissions of air pollutants associated with a host of adverse human health effects, including premature mortality.”⁴⁴¹ The results of EPA’s more

⁴³⁶ HDP2 Rule, 81 Fed. Reg. at 73942.

⁴³⁷ See HDP2 RTC at 1881 (“[A] one-year delay that allowed 10,000 additional glider vehicles to be produced with high polluting engines would result in the following impacts: 415,000 tons of addition NOx emissions, 6,800 tons of additional PM emissions, 700 to 1,600 premature deaths, \$3 to \$11 billion in PM-related monetized disbenefits.”).

⁴³⁸ HDP2 Rule, 81 Fed. Reg. at 73,942.

⁴³⁹ HDP2 Rule, 81 Fed. Reg. at 73,941.

⁴⁴⁰ HDP2 Rule, 81 Fed. Reg. at 73,883, 73,943 (“[I]t is clear that removing even a fraction of glider kit vehicles from the road will yield substantial health-related benefits.”).

⁴⁴¹ HDP2 Rule, 81 Fed. Reg. at 73,943.

recent analysis—a study conducted in 2017—show that in fact, EPA *underestimated* the criteria pollutant emissions from glider vehicles in the Phase 2 Standards.⁴⁴²

Most glider producers were already operating within the range of the cap, so their businesses will not be adversely affected,⁴⁴³ and the public health benefits of keeping as many glider vehicles off the road as possible are immense.

EPA has not and cannot justify an increase in the cap on production of uncontrolled glider vehicles. Given the extensive evidence of public health risks from uncontrolled vehicles, if the agency considers any change to the cap, it should consider lowering the maximum number of uncontrolled vehicles allowed.

XIII. Conclusion

EPA is proposing to revoke important safeguards against glider truck pollution based on an impermissible reading of the statute, without properly considering any of the most important and alarming consequences of this regulatory change for public health or a host of other vital considerations. For the foregoing reasons, EDF respectfully urges that EPA withdraw the Proposed Rule.

Respectfully submitted,

Alice Henderson
Chet France
Hilary Sinnamon
Erin Murphy
Martha Roberts
Peter Zalzal
Rachel Fullmer
Surbhi Sarang
For EDF

Howard Learner
Ann Mesnikoff
For EPLC

Peggy M. Shepard
For WE ACT

⁴⁴² Chassis Dynamometer Testing 22-27. EPA, “Chassis Dynamometer Testing of Two Recent Model Year Heavy-Duty On-Highway Diesel Glider Vehicles” at 22-27 (Nov. 20, 2017), *available at* <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-2417>.

⁴⁴³ As noted above, the one company known to produce more than 300 vehicles per year has publicly stated that its business can remain profitable at 300 vehicles per year. See Section 11(b).

**UNITED STATES OF AMERICA
ENVIRONMENTAL PROTECTION AGENCY**

Repeal of Emission Requirements for Glider Vehicles, Glider Engines, and Glider Kits; Proposed Rule)	Docket ID No.
)	EPA-HQ-OAR-2014-0827
)	

COMMENTS OF FITZGERALD GLIDER KITS L.L.C.

Fitzgerald Glider Kits L.L.C. (“Fitzgerald”) respectfully submits these comments in support of the Environmental Protection Agency’s (the “EPA”) proposed Repeal of Emission Requirements for Glider Vehicles, Glider Engines, and Glider Kits, 82 Fed. Reg. 53,442 (Nov. 16, 2017) (the “Proposed Repeal”). When adopted as a final rule, the Proposed Repeal will eliminate the emission requirements for glider vehicles, glider engines, and glider kits from the Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles—Phase 2, 81 Fed. Reg. 73,478 (Oct. 25, 2016) (the “Phase 2 Rule”).

Fitzgerald is a family-owned and operated business based in the Upper Cumberland Region of Tennessee that, over the course of almost three decades, has become the leading glider assembler in the country. We repair worn or wrecked trucks using glider kits that are manufactured by Peterbilt, Kenworth, Freightliner and Western Star—makers of the finest medium and heavy-duty over-the-road trucks on the market. The vast majority of our customers are small fleet owners or owner-operators who cannot afford new trucks built by these original equipment manufacturers (“OEM”) but nonetheless want the latest safety features, amenities and styling. Small fleet owners and owner-operators buy gliders because the alternatives are not viable, long-term business strategies.

The Phase 2 Rule was written with substantial input from trade associations, truck manufacturers and dealers, and large fleet owners whose financial interests are not served by the glider industry. It mandates that glider vehicles, glider engines, and glider kits satisfy emission standards applicable to new motor vehicles and new motor vehicle engines. Setting aside the legal problems with the Phase 2 Rule’s glider provisions, which are expressly acknowledged in the Proposed Repeal and addressed in detail below, there can be no question that these provisions, if left undisturbed, will be devastating. It will drive glider assemblers, small fleets and owner-operators out of business, thereby increasing the market share of the largest fleets and raising transportation costs for everyone.

The Phase 2 Rule’s glider provisions benefit the few at the expense of the many and should be repealed. We urge the EPA to finalize the Proposed Repeal consistent with our comments below.

1. *The EPA's Proposed Interpretation of the CAA Is the Only Reasonable Interpretation.*

Section 202(a)(1) of the Clean Air Act, Pub. L. No. 88-206, 77 Stat. 392 (1963) (codified as amended in scattered sections of 42 U.S.C.) (the “CAA”), authorizes the EPA to prescribe emission standards not from all motor vehicles and motor vehicle engines, but rather *new* motor vehicles and *new* motor vehicle engines. A “new motor vehicle” is “a motor vehicle the equitable or legal title to which has never been transferred to an ultimate purchaser,” and a “new motor vehicle engine” is “an engine in a new motor vehicle or a motor vehicle engine the equitable or legal title to which has never been transferred to the ultimate purchaser.” 42 U.S.C. § 7550(3) (CAA § 216(3)). In treating glider vehicles and glider kits as new motor vehicles and glider engines as new motor vehicles engines, the Phase 2 Rule stretches these definitions beyond their breaking points and ignores the realities of our industry.

First, glider vehicles and glider kits are not new motor vehicles. A glider vehicle contains a previously owned engine, previously owned transmission and a previously owned rear axle, all of which were sourced from a worn or wrecked truck that has been removed from the road (commonly referred to as a “donor vehicle”). The powertrain (i.e., the engine, transmission and rear axle) are the heart and soul of a truck: they can constitute as much as sixty percent of the value of a truck’s total value. A glider vehicle constitutes a “motor vehicle” under the CAA only because the powertrain components propel it. 42 U.S.C. § 7550(2) (CAA § 216(2)) (“The term ‘motor vehicle’ means any self-propelled vehicle designed for transporting persons or property on a street or highway.”). In every case, the equitable or legal title to a glider vehicle’s engine, transmission and rear axle was previously transferred to an ultimate purchaser—the owner of the donor vehicle—years before they are ever installed in a glider kit and sold a second time. Because these components, which make a vehicle a “motor vehicle” under the CAA, were previously transferred to an ultimate purchaser, a glider vehicle equipped with those same previously owned components cannot be a “new motor vehicle.”

The drafters of the Phase 2 Rule never undertook a serious analysis of sections 202(a)(1) and sections 216(3) before declaring glider vehicles to be new motor vehicles and imposing emission standards and strict production caps. The preamble of the Proposed Repeal, after a thorough examination of the text, context and legislative history of the CAA, correctly observes that “Congress intended, for purposes of Title II, that a ‘new motor vehicle’ would be understood to mean something equivalent to a ‘new automobile’—i.e., a true ‘showroom new’ vehicle.”¹ 82

¹ Certain groups have cautioned that the EPA’s proposed interpretation will create an unintended loophole, allowing any new truck to circumvent the definition of “new motor vehicle,” and regulation as a new motor vehicle under the CAA, merely by adding one previously owned component to the truck’s otherwise new engine. These claims are not serious, and they misstate what the Proposed Repeal does.

The focus of the Proposed Repeal is on vehicles with previously owned powertrains, not any previously owned parts however insignificant. A glider vehicle has a previously owned powertrain and therefore cannot satisfy the definition of “new motor vehicle” under section 216(3) of the CAA. The Proposed Repeal recognizes this and eliminates the offensive

Fed. Reg. 53,446. Glider vehicles clearly are not “showroom new” vehicles, and regulating them as such would be inconsistent with congressional intent.² *Id.* (“Based on [the CAA’s] structure and history, it seems likely that Congress understood a ‘new motor vehicle,’ as defined in CAA § 216(3), to be a vehicle comprised entirely of new parts and certainly not a vehicle with a used engine.”).

Second, a glider kit cannot, under any fair reading of the CAA, constitute a motor vehicle, let alone a new motor vehicle. A “motor vehicle” is “any self-propelled vehicle designed for transporting persons or property on a street or highway.” 42 U.S.C. § 7550(2) (CAA § 216(2)). A glider kit is a collection of truck parts sold together as a kit; it generally contains, among other things, a cab, fenders, dash instruments, wiring, steering wheel, steering gear, seats, chassis frame and front axle. It lacks a powertrain and cannot be driven under its own power until a powertrain is installed. Therefore, by definition, a glider kit cannot be regulated as a “motor vehicle” or a “new motor vehicle” under the CAA.³

provisions from the Phase 2 Rule. Furthermore, to our knowledge, in the fifty-plus years since the passage of the CAA, no one has ever argued that adding a single part to a new truck’s otherwise new engine should or could make that truck something other than a new motor vehicle. If such a loophole exists, it exists independently of the Proposed Repeal.

The idea that installing a previously owned part on an otherwise new engine could have such a drastic impact under the CAA is far-fetched. Engines are tracked by serial number, and the serial number is inscribed on the engine block. Other engine parts like starters, fuel injectors and cylinder liners may be replaced when they go bad, but the engine serial number is a constant. *See* 40 C.F.R. § 86.1920(b)(3)(v) (requiring in-use, heavy-duty diesel engine testing data to be reported to the EPA with the engine serial number). Installing a previously owned fuel injector in a truck’s new engine will no more make that truck something other than a “new motor vehicle” than installing a new fuel injector on a truck’s previously owned engine will make that truck a “new motor vehicle.”

² It would also be contrary to National Highway Traffic Safety Administration (“NHTSA”) regulations. As relevant here, when a new cab is used in the assembly of a truck, NHTSA will treat the truck as newly manufactured for purposes of the Federal Motor Vehicle Safety Standards and the National Traffic and Motor Vehicle Safety Act of 1996, Pub. L. No. 89-563, 80 Stat. 718, “unless the engine, transmission, and drive axle(s) (as a minimum) of the assembled vehicle are not new, and at least two of these components were taken from the same vehicle.” 49 C.F.R. § 571.7(e).

³ The drafters of the Phase 2 Rule were apparently unconcerned that their decision to treat glider kits as motor vehicles violated the fundamental definition—“motor vehicle”—upon which the EPA’s authority under the CAA to regulate “new motor vehicles” is based. *See, e.g.*, 81 Fed. Reg. 73,514 (“EPA thus can set standards for all or just a portion of the motor vehicle notwithstanding that an incomplete motor vehicle may not yet be self-propelled.”). Even if the EPA’s authority were as broad as the drafters claimed, prescribing emission standards for glider kits would still be nonsensical because glider kits do not emit greenhouse gases.

Third, treating glider engines as new motor vehicle engines runs roughshod over the definition of “new motor vehicle engine” under section 216(3) of the CAA. An engine is a “new motor vehicle engine” if it is “an engine in a new motor vehicle or a motor vehicle engine the equitable or legal title to which has never been transferred to the ultimate purchaser.” 42 U.S.C. § 7550(3) (CAA § 216(3)). Glider vehicles and glider kits are not new motor vehicles for the reasons described above, so a glider engine necessarily cannot satisfy the first prong of the “new motor vehicle engine” definition. A glider engine is a previously owned engine (the equitable or legal title having been transferred to the owner of the donor vehicle), so it cannot satisfy the second prong of the definition either.

The preamble of the Proposed Repeal is rightfully critical of the logic of the Phase 2 Rule as applied to glider engines:

A glider kit becomes a “motor vehicle” only after an engine . . . of the powertrain) has been installed. But while adding a previously owned engine to a glider kit may result in the creation of a “motor vehicle,” the assertion that the previously owned engine thereby becomes a “*new* motor vehicle engine” within the meaning of CAA section 216(3), due to the engine’s now being in a “new motor vehicle,” reflects circular thinking.⁴

82 Fed. Reg. 53,446.

Fourth, the drafters of the Phase 2 Rule, in their haste to expand their regulatory domain, implied that the EPA has regarded glider vehicles as new motor vehicles since at least 2011. Phase 2 Rule, 81 Fed. Reg. 73,513-14 (“In Phase 1, EPA already indicated that glider vehicles are new motor vehicles, at least implicitly, by adopting an interim exemption for them.”). As part of the Greenhouse Gas Emissions Standards and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles, 76 Fed. Reg. 57,106 (Sept. 15, 2011) (the “Phase 1 Rule”), the EPA adopted an “interim exemption” applicable to glider vehicles:

(j) *Limited prohibition related to early model year engines.* The prohibition in § 1037.601 against introducing into U.S. commerce a vehicle containing an engine not certified to the standards of this part does not apply for vehicles using model year 2014 or 2015 spark-ignition engines, or any model year 2013 or earlier engines.

76 Fed. Reg. 57,407 (currently at 40 C.F.R. § 1037.150(j), as revised).

Whatever can be said about the legal importance of the above-quoted “interim exemption,” it is not a bootstrap for establishing emission standards for glider vehicles, glider kits and glider engines. The CAA does not confer on the EPA the authority to regulate glider

⁴ To the extent the EPA has any authority to prescribe emission standards for glider engines, those standards must comport with section 202(a)(3)(D) of the CAA, which speaks specifically to rebuilt heavy-duty engines. 42 U.S.C. § 7521(a)(3)(D).

vehicles or glider kits as new motor vehicles or glider engines as new motor vehicle engines. An exemption adopted by the EPA cannot change that. *La. Pub. Serv. Comm'n v. FCC*, 476 U.S. 355, 374 (1986) (“[A]n agency literally has no power to act . . . unless and until Congress confers power upon it.”). Moreover, gliders vehicles existed when Congress adopted the CAA in 1963, and the EPA went fifty-three years (until the Phase 2 Rule in 2016) without attempting to regulate them. If anything, the Phase 1 Rule’s “interim exemption,” which was adopted in 2011, is a tacit acknowledgment of the EPA’s lack of authority to regulate glider vehicles under section 202(a)(1) of the CAA.

The drafters of the Phase 2 Rule did not undertake the careful statutory analysis that their actions demanded, and which the EPA eventually completed before crafting the Proposed Repeal. The EPA’s proposed interpretation of the CAA is not just *a* reasonable interpretation of the relevant statutes; it is the *only* reasonable interpretation.

2. *Repealing the Phase 2 Rule’s Glider Provisions Will Make Our Roads Safer and Will Ensure That Thousands of Small Businesses That Rely on Glider Vehicles Can Remain in Business.*

Effective January 1, 2018, the Phase 2 Rule limits larger glider assemblers like Fitzgerald to assembling no more than three hundred glider vehicles with pre-2010 engines in a calendar year. 40 C.F.R. § 1037.150(t). The limit is much lower for smaller assemblers. *Id.* § 1037.150(t)(1)(ii). After December 31, 2020, the limitation becomes an outright ban. Limiting the availability of glider vehicles will have numerous negative consequences, only some of which are addressed below.

The overwhelming majority of our customers are small fleet owners or owner-operators. Almost without exception, they buy glider vehicles because they cannot afford to buy new OEM trucks from, say, Peterbilt and Kenworth. They want the newest safety features, amenities and styling that those best-in-class manufacturers offer, and which our glider vehicles can deliver, and are willing to purchase a vehicle with a previously owned, rebuilt powertrain. Our customers are not confused about whether they are buying new motor vehicles (however that term may be defined).⁵ The purchase price of our glider vehicles is typically less than seventy-

⁵ Curiously, the drafters of the Phase 2 Rule regarded the manner in which glider vehicles are marketed as determinative, commenting that “[g]lider vehicles are typically marketed and sold as ‘brand new’ trucks” and “[a]dding the engine and transmission to the otherwise-complete vehicle does not prevent the glider vehicle from being ‘new’—as marketed.” 81 Fed. Reg. 73,514. Statements made in marketing materials cannot confer upon the EPA authority that it lacks under the CAA. *See Bowen v. Georgetown Univ. Hosp.*, 488 U.S. 204, 208 (1988) (“It is axiomatic that an administrative agency’s power to promulgate legislative regulations is limited to the authority delegated by Congress.”); *cf. Util. Air Regulatory Grp. v. EPA*, 134 S. Ct. 2427, 2446 (2014) (“EPA asserts newfound authority to regulate millions of small sources . . . and to decide . . . how many of those sources to regulate. We are not willing to stand on the dock and wave goodbye as EPA embarks on this multiyear voyage of discovery. We reaffirm the core administrative-law principle that an agency may not rewrite clear statutory terms to suit its own sense of how the statute should operate.”).

five percent of the purchase price of a comparable new OEM truck. Our glider vehicles also cost less to maintain and repair, get better gas mileage in most circumstances, and experience fewer breakdowns (resulting in less downtime). Small fleet owners and owner-operators are ultra-sensitive to costs of ownership, and glider vehicles allow them to compete effectively against larger fleets who are better able to absorb the costs of running new OEM trucks.

The Phase 2 Rule's glider cap and eventual prohibition will not cause these small fleet owners and owner-operators to buy new OEM trucks.⁶ Most, if not all, will be forced to decide between: (1) continuing to operate, and repair as best they can, their old truck with the same old engine and the same old safety technology; or (2) buying a used truck with an old engine and old safety technology. One thing is certain no matter their decision: trucks with old, more-polluting engines and outdated safety technology will remain on the road longer. This will lead to more truck breakdowns clogging our roads and highways, which in turn will create even more hazardous road conditions for everyone.

Critics of the Proposed Repeal have tried to dismiss our glider vehicles as "illegitimate," with some even derisively referring to them as "zombie trucks." These critics are ill-informed and their criticism is misplaced.

Our glider vehicles are safer and less-polluting than the donor vehicles they replace, and they keep small fleet owners and owner-operators in business. Conservatively, thousands of small businesses and tens of thousands of Americans depend on glider vehicles for their livelihood. The actual numbers are likely much higher than that. This includes businesses that assemble glider vehicles, businesses that supply or otherwise provide services to glider assemblers, small fleets and owner-operators, to name just a few of the groups who will be driven out of business by the Phase 2 Rule. With fewer competitors in the trucking industry, the largest fleets will grow their market share and transportation costs will almost surely increase across the board.

To provide a sense of scale, Fitzgerald's glider business and related businesses directly employ more than seven hundred people in the Upper Cumberland Region of Tennessee and southern Kentucky, one of the more economically depressed regions of the United States. Without the Proposed Repeal, most of these people will be sent home. The same is true for our more than one hundred vendors and suppliers, including the OEM truck manufacturers who manufacture the glider kits we use and the diesel engine manufacturers who rebuild many of the

⁶ A number of commenters, primarily representatives from various Volvo dealerships, have indicated that the price of a glider vehicle is comparable to the price of new trucks that they sell. Whether or not that is true, their statements are misleading. A glider vehicle equipped with a Peterbilt, Kenworth, Freightliner or Western Star glider kit will always be significantly less expensive than a comparable new Peterbilt, Kenworth, Freightliner or Western Star truck. In addition, Volvo does not manufacture glider kits, and we understand that many of our customers are unwilling to buy Volvo trucks. A comparison between the prices of glider vehicles equipped Peterbilt, Kenworth, Freightliner, and Western Star glider kits, on one hand, and new Volvo trucks, on the other hand, is not a meaningful comparison at all.

engines we install in our glider vehicles. These companies have employees who are dedicated to the glider industry; their success rises and falls with that of the glider industry. The Proposed Repeal will ensure that these workers can continue to provide for their families and put better-performing, less-polluting and safer trucks on the road.

3. *The Proposed Repeal Will Have Positive Emissions Impacts.*

Glider vehicles equipped with pre-2010 engines may not have all of the emissions-related technology of new OEM trucks, but such glider vehicles will nevertheless have positive emissions impacts. As we explained above, for every glider vehicle that is assembled, an old, more-polluting donor vehicle is removed from the road permanently. That glider vehicle, which is equipped with a rebuilt engine, will run more efficiently and emit less greenhouse gases (“GHGs”) than the donor vehicle it replaces. The glider vehicle also will run more efficiently and emit less GHGs than the small fleet owner or owner-operator’s old truck it replaces, or a used truck that the small fleet owner or owner-operator otherwise could have purchased. Many glider vehicles have the latest aerodynamic device technologies, which improve gas mileage and reduces overall GHG emissions. Glider assemblers like Fitzgerald also reuse approximately four thousand pounds of cast steel, including three thousand pounds for the engine assembly alone, *every time they assemble a glider vehicle*. This process of recycling, or upcycling, avoids the negative environmental impacts of steel casting, including the associated emissions.

Contrary to the picture that our critics have tried to paint, glider assemblers are not indifferent to environmental concerns. Many have made significant investments in research and development and equipment aimed at making glider vehicles greener. Glider assemblers have conducted innovative research on fuel additives, emission devices, and tire and wheel combinations in small production runs. Fitzgerald, for example, has spent a considerable amount of time and money identifying ways to lightweight the engines we rebuild. We have reduced the rotating mass of our rebuilt engines by roughly twenty-eight pounds each. This translates into material fuel efficiency gains and reduces the emissions from our glider vehicles. One member of the Fitzgerald family has even ventured into alternative propulsion technologies, partnering with the Nikola Motor Company to build the first five thousand Nikola trucks.⁷ When delivered, the Nikola truck, which is still in testing, is anticipated to be a fully electric, hydrogen-powered truck with zero emissions and a range of 800 to 1,200 miles.

These investments are exactly the sort of investments that the EPA should be encouraging. Repealing the Phase 2 Rule’s glider provisions will ensure that glider assemblers

⁷ For more information about this partnership and Nikola trucks, see Nikola Motors Co., *Nikola One*, <https://nikolamotor.com/one>; Tiffany Hsu, *Nikola Tweaks Hydrogen Truck Design, Raises Funding*, TRUCKS.COM (June 26, 2017), <https://www.trucks.com/2017/06/26/nikola-electric-truck-redesign/>; David Z. Morris, *Nikola Motors Introduces Hydrogen-Electric Semi Truck*, FORTUNE (Dec. 4, 2016), <http://fortune.com/2016/12/04/nikola-motors-hydrogen-truck/>; and Nicolas Stecher, *Sorry, Tesla Fanboys: The Best Zero-Emissions Semi Runs on Fuel Cells*, THE DRIVE (Dec. 11, 2017), <http://www.thedrive.com/tech/16734/sorry-tesla-fanboys-the-best-zero-emissions-semi-runs-on-fuel-cells>.

can continue to seek out better, cleaner technologies and offer superior trucks to their customers at affordable prices.

4. *No Annual Limit on Glider Assembly Is Warranted.*

The EPA sought comment on whether it should revise the small business exemption under 40 C.F.R. § 1037.150(t)(1)(ii) to increase the current three-hundred glider annual limit if it were to decide not to finalize the Proposed Repeal. The EPA also sought comment on what a reasonable increase would be in that event. Fitzgerald's position on these two questions is straightforward. The EPA's proposed interpretation of the CAA is the correct interpretation. The EPA does not have the authority to regulate glider vehicles or glider kits as new motor vehicles or glider engines as new motor vehicle engines under section 202(a)(1) of the CAA. For that reason, the EPA lacks the authority under that statute to establish any annual limitations on glider assembly. Even if the EPA had such authority, any number selected by the EPA would be arbitrary and very likely would not suit the needs of all glider assemblers and their customers.

* * * * *

Fitzgerald appreciates the new EPA administration's commitment to reversing regulatory overreach and minimizing the impact of regulation on small businesses. We support the Proposed Repeal as detailed above.

Respectfully submitted,



Tommy C. Fitzgerald
President and CEO
Fitzgerald Glider Kits L.L.C.

Faculty Senate Resolution on Fitzgerald Research Study

Whereas our reputation and integrity as an institution and, by extension, the faculty, staff and students, are two of the most valuable assets of the University;

Whereas our reputation has recently been damaged because of a study funded by Fitzgerald Glider Kits and used to influence Federal Policy; therefore, be it

Resolved, that the University President should immediately intervene to protect the solid and excellent research reputation of the University by the following recommended and responsible actions:

1. Suspend Tom Brewer, Associate Vice President of Research, from all University activities pending the results of an independent investigation headed by an external investigator according to University Policy 780;
2. Issue a letter, signed by the President, withdrawing all Tennessee Tech support from the study, pending the results of the aforementioned investigation;
3. Suspend all present research activities and other associations with Fitzgerald, pending the results of the investigation;
4. Confirm within 5 working days of the passing of this resolution the successful formation of the impartial investigatory committee under University Policy 780, led by an independent external investigator, to the Tennessee Tech Faculty Senate President and Board of Trustees;
5. Include a review by the investigatory committee of the actions, responsibilities and involvement of the Vice President of Research and Economic Development and the Associate Vice President for Research.

Motion by Senator Holly Stretz

Seconded by Senator Ahmed ElSawy

Approved by Faculty Senate vote on January 30, 2018.

TTU Faculty Senate Business Meeting
January 29, 2018

Members present: Douglas Airhart, Ismet Anitsal, Deborah Ballou, Tammy Boles, Troy Brachey, Chris Brown, Debra Bryant, Andrew Callender, Corinne Darvennes, Ahmed ElSawy, Billye Foster, Steven Frye, Stuart Gaetjens, Melissa Geist, Mark Groundland, David Hajdik, Jeremy Hansen, Paula Hinton, Steve Idem, Barbara Jared, Christy Killman, David Larimore, Regina Lee, David Huddleston for Jane Liu, Lori Maxwell, Tony Michael, Christine Miller, Holly Mills, Linda Null, Brian O'Connor, Joseph Ojo, Richard Rand, Jeff Roberts, Cara Sisk, Troy Smith, Sandi Smith-Andrews, Holly Stretz, and Jeremy Wendt

Members absent: S.K. Ballal, Jason Beach, Ward Doubet, Ann Hellman, Shelia Hurley, and LeeAnn Shipley

Guests: Dr. Bharat Soni, VP of Research & Economic Development; Mr. Tom Brewer, Associate VP Strategic Research Initiatives; Dr. Ben Mohr, CEE Chairperson; Dr. Darryl Hoy, Dean of the College of Engineering; Dr. Mohan Rao, ME Chairperson; Dr. Vahid Motevalli, Associate Dean for Research and Innovation of the College of Engineering; Barbara Fleming, TTU Board of Trustees; and Dr. Julia Gruber, faculty member

Approval of Agenda

Senator Darvennes made the MOTION to approve today's agenda. It was seconded by Senator Smith-Andrews, and APPROVED by Senators.

Approval of Minutes and Notes

Senator Hinton made a MOTION to approve the minutes of November 13, 2017, and seconded by Senator Larimore. The minutes were APPROVED with last 15 minutes missing. Senate President Killman will add these when located. Senator Geist made a MOTION to table a vote on the notes of December 4, 2017, seconded by Senator Smith-Andrews, and APPROVED.

New Business – Fitzgerald Glider Kits Discussion

Senate President Killman explained the format for the next discussion followed by questions.

Comments by Dr. Bharat Soni:

Dr. Soni gave a brief synopsis of the research study on the Fitzgerald Glider Kits. He said those involved with this research complied with rules and regulations, but sometimes man and materials make errors. He assured us that Tech's research policy 780 Misconduct in Research was followed. The issue is the allegation questioning the quality of research. An external review committee will investigate. Dr. Soni will work with Dr. Hoy on recommendations for external reviewers. In about 30 to 45 days we should have some results from reviewers of both investigations.

Comments by Mr. Tom Brewer:

Mr. Brewer said his background is in automotive industry with process and people. Saturn Corp. was one of his previous employers. He has been at TTU for the last 3 ½ years. He outlined the methodology and chronology as of today. In Spring 2016 he sat down with Fitzgerald leadership, an engineering company, but they had no engineers on staff. Fitzgerald came to Tom after the EPA proposed changes to the Clean Air Act in Phase II, with guidelines for older engines to meet emission standards. Fitzgerald had never tested these engines before, because they never had to. They wanted help understanding and help implementing tests for remanufactured engines. A study team was established, a proposal was developed in June 2016 and it was submitted. The study was \$39,000 with \$12,000 of it for equipment. An EPA approved portable hand-held device for field testing was used to test the exhaust of 13 vehicles, 5 of which were brand new. Tests indicated no significant differences in any of the 13 tested in Fall 2016. The Phase I report was presented to Fitzgerald. In October 2016, the Clean Air Act Phase II appeared in the Federal Register for comments. Mr. Brewer says he stands by this study using the calibrated hand-held device.

The concern today is about flawed and shoddy research, as stated in media articles. Two customers, Fitzgerald and the EPA, were satisfied that we answered their questions and did what they wanted us to do for them. The EPA emailed President Oldham to ask to meet with the study team to understand their testing protocols. The EPA recognized that Tech did a field test, not a lab test, and gave no negative comments or criticisms. The EPA started using ultra-low fossil fuel beginning in 2006 that resulted in 90% lower emissions. The EPA just took specifications, but didn't test. Neither customer, Fitzgerald nor the EPA, said the work was flawed or shoddy. News articles didn't have all the information, only some of it.

So where are we today? The EPA came out with a repeal in November. The EPA took out glider kits from engines. The EPA does not have the authority to define glider kit engine as a new vehicle. A repeal went into open comment until Jan 5th. The EPA is now analyzing those comments before going into law, or not.

Comments by Dr. Ben Mohr:

Dr. Mohr said he was the original PI in 2016, but withdrew effective last week. He is in the CEE Dept., with cement and concrete, and also pollutants (water and air). His concerns are that a lot of this was done while he was PI, but he not able to review data and report before it was sent to others. He referred to his resignation letter forwarded to Senators last week.

Questions from Senators:

Questions asked by Senators were directed to a specific person in the room. Most of the questions and responses are summarized below.

1. Senator ElSawy asked Dr. Mohr: Why did you not ask someone in Mechanical Engineering Dept. who has experience in this area? Dr. Mohr said the project was only to compare classes of vehicles, and generate some basic numbers.

2. Senator Ballou asked Dr. Mohr: What year were these engines you tested? Dr. Mohr said he didn't have this data here. Mr. Brewer said the new engines had less than 50 miles, and were all EPA certified engines. Remanufactured engines were also documented.
3. Senator Ojo asked Mr. Brewer: Who has the data? Where was it done? Why believe the data? Why did you draw the conclusions you did? Who wrote the letter to the President? Mr. Brewer said he wrote the letter for the President to sign. Congresswoman Diane Black asked Fitzgerald for the summary data for Phase I. Fitzgerald also asked us to do an Environmental Impact Study. A graduate engineering student did the tests.
4. Senator Geist asked Dr. Mohr: Who was the PI? Tom Brewer was named PI, too. So where/when did the PIs change? Dr. Mohr said he didn't know of the change along the way, and was never notified of a change.
5. Senator Darvennes asked Mr. Brewer: Ben Mohr and Mark Davis are listed on the original proposal, so why did you take data even though you weren't listed on proposal? Mr. Brewer said because he brought the request to the University and is the University representative, but was not part of the activation. Dr. Mohr was used as the engineering credential for the project. Mr. Brewer said he was at all the tests. Data was analyzed by a graduate engineering student, a first-year student. It is unknown if an advisor was working with this student.
6. Senator Ballou asked Mr. Brewer: There is a chasm between the study and the content of the letter with your name on it. One should not overstate the evidence that has been done. The letter is a gross overstatement. What did the President ask of you before he signed the letter? Was there sufficient caution about no particulate data being collected? The claims in the letter have conclusions that are exaggerated. Mr. Brewer said he reviewed the letter, but doesn't recall the President asking any questions. Dr. Soni said the same description given to Senators today was the same given to the President. Mr. Brewer continued by saying the particulate matter was measured with an approved hand-held device from EPA. Tests were based on 5 states of load of a vehicle, with 75% as the representative load. Fitzgerald turned over some, but he's not sure if all information, was turned over to EPA. Dr. Soni said most of the criticism is "from the 2-page stupid letter."
7. Troy Smith asked Mr. Brewer: Can you tell us what your educational background is? Mr. Brewer said his background is a Bachelor's degree in business administration, but also engineering work.
8. Rand asking Mr. Brewer and Dr. Soni: There are very specific standards. This research did not engaged an academic unit, but research was done in the name of the University. Is this common practice? There is a relationship of research done related to the funding. How's this all related? There's an appearance of conflict of interest. Mr. Brewer

responded by saying that we did not do research for EPA, only Fitzgerald. The conflict of interest timeline started in December 2016 with a report given to Fitzgerald. In March 2017, Millard Oakley was on campus talking with President Oldham, and he knew of our study with Fitzgerald. Mr. Fitzgerald said he had acreage by Sparta airport with which we could develop an automotive center. This was offered to us by Fitzgerald about 2 months after the report submitted, and had nothing to do with our research work for them.

9. Senator Stretz asked Dr. Soni: Who decided on the Phase II report? How did you decide whose name to put on it? Dr. Soni said he didn't have an answer today, and it will be answered later in process.
10. Senator Ojo asked Mr. Brewer: Who is the student's advisor? Who was supposed to do the calculations? Mr. Brewer said Steve Idem is now. Senator Idem said he is only serving as an academic advisor, and had nothing to do with the data reduction.
11. Troy Smith asked Mr. Brewer: Someone must have been responsible and realized the project research followed by the land offer, as a conflict of interest. Mr. Brewer said that Dr. Soni, himself, Dr. Saltsman, and the President were involved. We never thought there was a correlation.
12. Senator Ballal asked Mr. Brewer: We have a good reputation in engineering. How did you end up here, from Spring Hill? Mr. Brewer said he retired from General Motors, and then worked at the Northfield Building in Spring Hill, TN to re-train employees until it became idle, but not closed. Maury County had highest unemployment in the State at that time. A workforce development center was established at this old site, and Mr. Brewer helped build this program. Tech looked at it as a satellite campus a few years ago. Mr. Brewer was also President of TAMA (Tennessee Automotive Manufacturers Association) for Tennessee. He was asked to externalize the University in the automotive industry. Dr. Soni said that Mr. Brewer is an industry liaison for us.
13. Julia Gruber, AAUP representative asked if we can we rely on faculty expertise in the future. For external review, who at Tech benefited from this whole study?
14. Senator Maxwell to Dr. Soni: Dr. Mohr and Mr. Brewer didn't change the PI, nor did Dr. Soni. So who did? Dr. Soni is not sure the PI has been formally changed, so he can't answer that.
15. Senator Darvennes asked Dr. Mohr: This is testing, not research. A student took data, along with a technician. Were you aware they were going to take data, and aware what they were going to do with the data? Dr. Mohr said yes, but he wasn't present for it. The raw data was seen by Dr. Mohr, but he didn't write the report. Mr. Brewer and Mark wrote report.

16. Senator Groundland asked Dr. Soni: He considers Tech to have a stellar reputation in engineering, and is thinking about damage control moving forward. With an external review in place, what else are we going to do for damage control? This will affect grants, incoming students, new faculty, and more. Dr. Soni said discussions are going on now.
17. Senator Rand asked about the letter to Congresswoman Diane Black, that a decision was made to not include engineering faculty in the report. Why didn't you get an engineer to write that section? In the future, have qualified academic people writing appropriate sections.
18. Dr. Huddleston asked Mr. Brewer: What role did you expect that credential to serve? Mr. Brewer said to be the subject matter expert. This should be answered in the external review at a later date.

Senator Foster made a MOTION to table all other agenda items until the next business meeting.

The Senate will meet next Monday, Feb. 5 at 3:50 PM as an emergency meeting to further discuss this topic and cover the agenda items originally planned for today, and also on February 12th and 19th. The motion was APPROVED, with one opposed.

Discussion among Senators continued regarding the Fitzgerald Glider Kits issue. Has the Fitzgerald Company been asked to release it? Yes, and they won't do it.

Senator O'Connor said from Mr. Brewer's comments, Fitzgerald is OK with what we did, the EPA is OK with what we did, so where was the criticism? Dr. Hoy said the *Washington Post* article in November wrote about a cozy relationship between TTU and Fitzgerald, followed by articles and comments from others in the industry. We need to withdraw from this study pending an external investigation. He said the College of Engineering is appalled.

Senator O'Connor said we are at risk of getting into politics. Can we withstand the questioning? He hopes this doesn't develop into turf battles. Dr. Hoy said we have a qualified expert in engineering on this, with sound credentials, who was never asked to join this study nor give any opinion.

Senator Hinton is concerned that President Oldham's name is not mentioned more often in connection to this issue.

Senate President Killman said that Dr. Soni asked Dr. Otuonye to be lead internal investigator. President Oldham said we are going to do the right thing here, by doing an external investigation, etc.

Senator Stretz drafted a memo asking the Senate for a resolution in the form of a MOTION. Senator ElSawy seconded the motion.

Senators had some additional comments. Everything today encapsulates our concerns of the past few years. This was almost predictable. There is no emphasis on overall leadership in this project. Dr. Motevalli said why do we have a PI who is not qualified? The paperwork did not go thru any of the Centers at TTU. The final paperwork was received last week with a 2-page summary, signed by Dr. Soni. Mr. Brewer's experience is in automotive workforce development.

The Senate further discussed the resolution. We feel this needs to be an external review, not an internal one as Dr. Soni wants. Suggestions were made to tighten up the language in the resolution. Senator Geist made a MOTION to table a vote on the resolution until next week, and it was seconded by Senator Airhart. Ms. Barbara Fleming thanked everyone for this meaningful discussion, and wants to be sure we don't throw Tech under the bus. Be 100% sure we are upholding this with Tech. Senator Airhart expressed concern with Senator O'Connor's comments about whether or not we are jumping to conclusions based on editorials. This resolution doesn't address the process, only the misconduct in research. This can go public if passed, and sent to the President. Senate Secretary Lee will work with Senators Stretz and Ballou to clean-up parts of the resolution and put it in the proper format. An electronic vote will be taken tomorrow. Senator Foster moved to amend the MOTION to reflect this plan. The motion was APPROVED, with one opposed, and nobody abstaining.

The meeting adjourned about 5:45 PM.

Respectfully submitted,
Regina Lee, Faculty Senate Secretary

Approved: February 12, 2018



Office of the President

TENNESSEE TECH

February 1, 2018

Dr. Christy Killman
President, TTU Faculty Senate
Campus Box 5043
Cookeville, TN 38505

Dear Dr. Killman:

Thank you for documenting the Faculty Senate's concerns about the Fitzgerald Glider Kit research in your email on January 30. I certainly share your desire to ensure the academic research integrity of the university along with our reputation as an honest broker of knowledge. To that end, it is important that we strictly follow established university policy and provide everyone with fair and appropriate due process.

Therefore, in response to your resolution I am sharing the actions currently being taken regarding the issue.

An allegation has been received, and I have initiated the processes called for in Tennessee Tech Policy 780, Misconduct in Research. Dr. Sharon Huo has accepted the appointment as the Research Integrity Officer. She will assist the inquiry and investigation committees and institutional personnel in order to assure compliance with policy procedures.

In addition to the inquiry and investigation described in the research misconduct policy, I have asked that an external peer review of the research itself be conducted concurrently. I do not anticipate any university statements being made during the inquiry, investigation, and peer review processes.

In regards to employee suspensions and in accordance with TTU policy 650, Tennessee Tech follows an investigative due process prior to any corrective action. Tennessee Tech does not take disciplinary action lightly and has set a precedent to utilize disciplinary

Dr. Christy Killman
February 1, 2018
Page Two

administrative absences (i.e. suspensions) in situations that involve tangible safety or security concerns.

Prior to receiving your resolution, activities related to the sponsored research project referenced in the allegation already had been suspended pending completion of the process described in the policy.

Dr. Huo will be in contact with you soon regarding your role within Policy 780.

Sincerely,



Philip B. Oldham
President

PBO/ds

cc: Dr. Tom Brewer
Dr. Darrell Hoy
Mr. Tom Jones
Dr. Ben Mohr
Dr. Bharat Soni

Faculty Senate Resolution on Fitzgerald Study

Whereas our reputation and integrity as an institution and, by extension, the faculty, staff and students, are two of the most valuable assets of the University;

Whereas our reputation has recently been damaged because of a study funded by Fitzgerald Glider Kits and used to influence Federal Policy; therefore, be it

Resolved, that the University President should immediately intervene to protect the solid and excellent research reputation of the University by the following recommended and responsible actions:

1. Suspend Tom Brewer, Associate Vice President of Research from all University activities pending the results of an independent investigation headed by an external investigator according to University Policy 780;
2. Issue a letter, signed by the President, withdrawing all Tennessee Tech support from the study, pending the results of the aforementioned investigation;
3. Suspend all present research activities and other associations with Fitzgerald, pending the results of the investigation;
4. Confirm within 5 working days of the passing of this resolution the successful formation of the impartial investigatory committee under University Policy 780, led by an independent external investigator, to the Tennessee Tech Faculty Senate President and Board of Trustees;
5. Include a review by the investigatory committee of the actions, responsibilities and involvement of the Vice President of Research and Economic Development and the Associate Vice President for Research.

Mover: Senator Holly Stretz

Secunder: Senator Ahmed ElSawy

Approved by Faculty Senate vote on January 30, 2018.

POSTSCRIPT

Sci-fi advances in DNA could revolutionize crime-fighting P. 36-37



Like Comment Share

Tennessee GOP Rep. Diane Black, former chair of the House Budget Committee, is a Trump fan.

Congresswoman Diane Black supports the president despite his controversies

WASHINGTON — Not every female member of Congress would volunteer to stand next to President Trump. But Diane Black is happy to do so. Whether this Republican congresswoman is part of a high-stakes budget meeting in the White House or traveling on Air Force One to a campaign event, Black can often be seen alongside the president despite criticism of his coarse language and colorful past with women.



SALENA ZITO

Yes, he is a different personality, different than any president I've seen in my lifetime," Black told me. "He says things like he sees them. Now, do I always agree on how he says things? No, I don't, but that is his style and who he is, and there is so much more to him and his accomplishments than his style." Black was the first female chair of the powerful House Budget Committee. Often, she's been the only woman present in critical budget meetings where health-care reform or the tax bill were discussed. She is very much like that Trump supporter whom pollsters missed during the 2016 election. Wealthy, successful and conservative, pundits would look at Black and think in no way she connects with Trump.

But Black and Trump have similarities. He was born into a well-off family and is comfortable moving in a world of blue-collar hard hats. Black comes from a world of hard hats and now is well off.

Sitting in her home in Wash-

ington, just 38 miles from the public-housing complex where she spent her early childhood, she attributes her success to her stubborn determination. "I never back down," she admits in her soft drawl. Even her own mother cautioned her ambitions. When Black told her she wanted to become a nurse, her mother replied, "Honey, you have money for you to go to college just need to get married and have babies," remembers Black.

"I told her I was not going to have babies one day but I was going to be a nurse first."

Black threw herself into 16-hour shifts, determined that her family was "going to make it."

Black attended school full-time and worked nights and weekends cleaning houses, ironing other people's clothes "and any other little job I could find to pay for books, transportation and the next year's tuition." She graduated, started working, fell in love, got married and had two children. "I had problems with alcohol, and I wanted that he wanted to move on. I announced that I was pregnant with our third child. He left me with two babies, 3 and 6, and one on the way."

Black attended school full-time and worked nights and weekends cleaning houses, ironing other people's clothes "and any other little job I could find to pay for books, transportation and the next year's tuition."

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drug-testing company that grew to 5 employees. The sale of that company began in 2010 and made Black one of the richest members of Congress, with her and her husband's wealth estimated at \$77.8 million in 2014 by the Center for Responsive Politics.

Frustrated with Tennessee's approach to health care, Black felt driven to run for state office. Despite zero political experience, she won a state house seat in 1998 and a state senate seat in 2004. Six years later she won the sixth congressional district seat of Tennessee, the first time the territory has been represented by a Republican since 1923.

In December, Black recalled her earlier experiences as a Tennessee lawmaker that included one member trying to corner her and pro-against her and another member rarely calling her by name, instead only addressing her as "Nurse Godbody."

"It was objectifying, disrespect and highly inappropriate for any setting," she wrote in an op-ed.

As for how Trump has treated her as often the only woman in the room, Black says the president is not only credibly respectful, he never fails to ask her opinion. "He has always asked me how I see the problem or how I would fix something," she says.

Black's confidence and determination make her feel comfortable as a woman defying conventional wisdom on Trump. "In my life, people have presented reasons why I could not or should not do something," she says. "And all of a sudden I have worked to prove I could do it."

Lady & the TRUMP



Diane Black
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 - Denise Childs** Keep the good stuff coming our way! Thanks
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Engine: N/A
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Wheelbase: 195
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Truck Color: Mayfield Dai

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Status: **Kit Only**
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Engine: N/A
Trans: N/A
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Rear Ratio: 3.55
Truck Color: Spectramaster

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Truck Color: Viper Blue El

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Truck Color: Viper Red

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Cab: Daycab
Engine: N/A
Trans: N/A
Wheelbase: 195
Rear Ratio: 3.55
Truck Color: Viper Red

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Status: **Kit Only**
Cab: Daycab
Engine: N/A
Trans: N/A
Wheelbase: 195
Rear Ratio: 3.55
Truck Color: Viper Red

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Daycab Glider Kit Truck, Sto

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Stock #: 455407
Status: **Kit Only**
Cab: Daycab
Engine: N/A
Trans: N/A
Wheelbase: 195
Rear Ratio: 3.55
Truck Color: White

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Stock #: 455250
Status: **Kit Only**



Cab: Daycab
Engine: N/A
Trans: N/A
Wheelbase: 195
Rear Ratio: 3.55
Truck Color: Gunmetal Eff

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CONNECT WITH US



From: Smith, Diane On Behalf Of Oldham, Philip
Sent: Thursday, February 15, 2018 12:58 PM
To: FacultyStaff
Subject: Statement about sponsored research

Our Tennessee Tech community shares the desire to ensure the academic research integrity of the university along with our reputation as an honest broker of knowledge and research initiatives.

The processes called for in Tennessee Tech Policy 780, Misconduct in Research, allow university community members to express concern and initiate an inquiry. The policy affords all complainants, respondents, and witnesses the broadest opportunity for confidentiality consistent with federal and state laws.

Although some names and reported details about a specific investigation have appeared in recent media coverage, they were not released by Tennessee Tech University. University policy guides our communication decisions on internal inquiries and investigations. Because it is important that we strictly follow established university policy and guard against bias in the process, the university will not release individuals' names or specific details associated with an inquiry or investigation unless required by law.

The federal government requires a policy and procedures for such matters as a part of the process to apply for federal assistance to conduct research projects. Tennessee Tech has chosen to go beyond this requirement and to adopt a broader policy that applies to all university research, not just those receiving federal funding. Tech's policy outlines the procedures and faculty's involvement in the process.

Research related to Fitzgerald Glider Kits is being examined under TTU Policy 780. Dr. Sharon Huo has accepted the appointment as the Research Integrity Officer. She will assist the inquiry and investigation committees and institutional personnel in order to assure compliance with policy procedures.

No university employees have been suspended in relation to this matter. In regard to employee suspensions and in accordance with TTU Policy 650, Disciplinary Action, Tennessee Tech follows an investigative process prior to any corrective action. Tennessee Tech does not take disciplinary action lightly and has set a precedent to utilize disciplinary administrative absences (i.e. suspensions) in situations that involve tangible safety or security concerns. Out of respect for its employees, TTU will not make future statements related to specific employees.

I do not anticipate any further university statements being made during the inquiry or investigation.

As Tennessee Tech research projects increase in number and scope, we can expect more visibility and more discussion within industries and among advocacy groups interested in research findings. Often advocacy groups and stakeholders engage in emotional and heated discussion related to their differing interests and beliefs. Our mission is clear: To add to the body of knowledge with results that promote sound decisions and informed choices.

Phil

Philip B. Oldham, President
Box 5007
One William L. Jones Drive
Derryberry Hall 206
Cookeville, TN 38505



Registry of Election Finance Sworn Complaint

A registered voter of Tennessee may file a sworn complaint alleging that a statement filed regarding an election for which that voter was qualified to vote does not conform to law or to the truth or that a person has failed to file a statement required by law (T.C.A. §2-10-108 (a)).

This form should be completed in its entirety, signed and notarized and then mailed to: Registry of Election Finance, 404 James Robertson Parkway, Suite 104, Nashville, TN 37243.

Please note: any person who knowingly files a sworn complaint which is false or for the purpose of harassment is subject to civil penalties and is liable for reasonable attorney's fees incurred by a candidate who was the subject of such complaint (T.C.A. § 2-10-108 (d)).

Complainant

Name Frank Hurdle

Address [REDACTED]

City Nashville State TN Zip 37216

Phone [REDACTED] E-Mail [REDACTED]

Complaint

Please provide as much detail as possible in the description of your complaint. Please attach additional pages and any documentation as necessary.

See Enclosed Letter

Signature [Signature] Date 2/15/18

Sworn to and Subscribed before me in the State of TN

This 15th Day of Feb. 2018

Ghast Deaman
Notary Public

March 8, 2021
Date Commission expires



February 14, 2018

Attn: Drew Rawlins
Bureau of Ethics and Campaign Finance
404 James Robertson Parkway, Suite 104
Nashville, TN 37243

Mr. Rawlins,

I have reviewed the campaign finance disclosure Congresswoman Diane Black submitted to your office on January 31, and I am appalled by the number of improper contributions she has reported. These manipulations of state law are the worst sort of politics. She has violated the Tennessee Contribution Limits Act and Chapter 0530-1-3-.08 of the Tennessee Registry of Election Finance Rules.

The Tennessee Contribution Limits Act states in part:

All contributions made by a person, either directly or indirectly, on behalf of a particular candidate, including contributions which are in any way earmarked or otherwise directed through an intermediary or conduit to such candidate, shall be treated as contributions from such person to such candidate. (Tenn. Code Ann. § 2-10-303(3).)

Congresswoman Black's year end supplemental disclosure is littered with contributions from businesses whose owners have made the maximum contribution as individuals. When accounting for contributions through the businesses they own, several of these donors exceed contribution limits by tens of thousands of dollars. I have enclosed a copy of Congresswoman Black's report and have highlighted the individuals and businesses that have exceeded contribution limits when combined. They include:

- AAA Storage LLC/Garry McNabb
- Burnett Family Partnership/David Burnett
- Cash Express LLC/Garry McNabb
- Chemi Aggra LLC/Millard Oakley
- Circle C Trucks and Equipment/ Jamie and Justin Crowe
- First Funding LLC/ Millard Oakley
- Fitzgerald Glider Kits/Tommy Fitzgerald
- Fitzgerald Peterbilt I/Tommy Fitzgerald
- Fitzgerald Peterbilt II/Tommy Fitzgerald
- Fitzgerald Peterbilt III/Tommy Fitzgerald
- Fitzgerald Peterbilt IV/Tommy Fitzgerald
- Fitzgerald Peterbilt V/Tommy Fitzgerald
- Hilton Head Boathouse/Millard Oakley
- Honky Tonk Central, LLC/TJ Willis
- Island Marine LLC/Millard Oakley
- Kelly's Sales and Service Center/ Jamie and Justin Crowe

- Lacey Roberts Rental/Lacey Roberts
- M&M Building Partners/Garry McNabb
- Mid-South Liquidators/ Jamie and Justin Crowe
- RSF Investors LLC/TJ Willis
- Southeastern Loan Funding/Garry McNabb
- Tennessee Funding LLC/Garry McNabb
- Tootsie's Entertainment LLC/TJ Willis
- Unity Builders LLC/David Burnett

Chapter 0530-1-3-.08 of the Tennessee Registry of Election Finance Rules states in part:

There shall be a rebuttable presumption that a committee or organization is acting as a conduit or intermediary for purposes of T.C.A. § 2-10-303(3) if:

- (a) the committee or organization has fewer than three (3) contributors;
- (b) these contributors provide seventy-five percent (75%) or more of the committee's or organization's total contributions within a ninety (90) day period; and
- (c) seventy-five percent (75%) or more of the committee's or organization's political contribution expenditure(s) are to a single candidate or committee within a ninety (90) day period;

Congresswoman Black accepted contributions from two conduits as defined by this rule. Fitzgerald Peterbilt PAC's sole contributor is Fitzgerald Peterbilt Management, Inc. 100% of the contributions received by Fitzgerald Peterbilt PAC occurred in the 23 day period between September 21, 2017 and October 13, 2017. Fitzgerald Peterbilt PAC's \$23,500 contribution to Diane Black for Governor represents 99.1% of the PAC's expenditures during the year end supplemental 2017 reporting period.

Fitzgerald Industries PAC's sole contributor is Fitzgerald Industries, Inc. 97% of the contributions received by Fitzgerald Industries PAC occurred on September 21, 2017. Fitzgerald Industries PAC's \$23,500 contribution to Diane Black for Governor represents 99.5% of the PAC's expenditures during the year end supplemental 2017 reporting period.

I have enclosed copies of the Fitzgerald Peterbilt PAC and Fitzgerald Industries PAC year end supplemental reports.

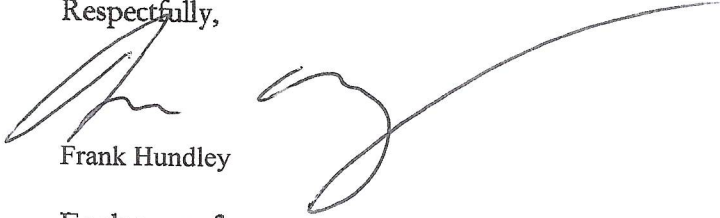
I realize that some violations of campaign laws are made by mistake, but this pattern of violations appears intentional. Congresswoman Black should know better. In my view, her disclosure demonstrates a systematic disregard for state laws. The credibility of those laws and of your board will be determined by the response to her violations.

I urge you to review Diane Black for Governor's campaign finances thoroughly and act swiftly to correct these violations. Congresswoman Black should refund all contributions received in excess of the individual contribution limits immediately, and your board should consider a civil penalty large enough to ensure candidates think twice before testing the limits of campaign finance laws in the future.

In addition, in order to maintain trustworthiness and integrity on your board, I suggest that Tom Lawless recuse himself from discussion and deliberation of this matter. Mr. Lawless has contributed at least \$7,800 to Congresswoman Black's various campaigns over the last ten years, and his wife contributed \$1,000 in November to Diane Black for Governor. Given Mr. Lawless' close relationship with Congresswoman Black, it is difficult to believe he could be impartial when reviewing this matter.

I appreciate your immediate attention and action.

Respectfully,

A handwritten signature in black ink, appearing to read 'Frank Hundley', is written over a large, faint, curved line that spans across the signature area.

Frank Hundley

Enclosures: 3



MEMORANDUM

TO: Christy Killman, President TTU Faculty Senate
Melissa Geist, Faculty Representative, TTU Board of Trustees
Julia Gruber, President, AAUP

FROM: Darrell Hoy, Interim Dean, College of Engineering *D. Hoy*

DATE: 02/16/2018

SUBJECT: Request for Your Groups to Continue to Urge President Oldham to Publically Suspend TTU Support for the Results of the Fitzgerald Study and Letter to Congresswoman Dianne Black

On behalf of the College of Engineering, I would like to request your assistance, as elected representatives of the TTU faculty, to continue to urge President Oldham to immediately and publically suspend TTU support of the results of the Fitzgerald testing, and withdraw the letter sent to Congressman Dianne Black on June 15, 2017, which contained assertions based on the aforementioned testing. The suspension of this support and withdrawal of the letter would be temporary, pending the results of the internal and external investigation.

By not publically suspending the support for the Fitzgerald testing and the letter to Congressman Black, pending the results of the investigations, the University is effectively remaining in support of these studies by their non-response. This lack of a public response has, and is continuing to do significant damage to the reputation of this Institution and in particular, the College of Engineering.

I contend that the evidence placed into the public arena and public docket of the EPA by both Fitzgerald and TTU themselves, cast sufficient doubt that the burden of proof is now on President Oldham to show why the administration continues to lend its tacit support to the Fitzgerald testing and his letter to Dianne Black.

Furthermore, as clearly revealed in the questioning of Associate Vice-President Tom Brewer and Vice-President Bharat Soni during the Faculty Senate meeting on Jan 29, 2018 (minutes available on the faculty Senate website) that no qualified, credentialed engineering faculty member (1) oversaw the testing, (2) verified the data or calculations of the graduate student, (3) wrote or reviewed the final report submitted to Fitzgerald, or (4)

wrote or reviewed the letter submitted to Dianne Black with the farfetched, scientifically implausible claim, that remanufactured truck engines met or exceeded the performance of modern, pollution-controlled engines with regards to emissions.

Since no qualified, credentialed engineer was involved, the work performed is by definition not a scientific research study and therefore afforded the protections offered by TTU Policy 780 “Misconduct in Research”. Furthermore, there is no policy that prevents the President from putting the University’s support of this testing on hold, pending the results of an official investigation.

The damage already done and continuing to be done to the reputation of the University is significant, and as an institution, we cannot afford to wait weeks and months until these investigations are completed. The recent article on the front page of the New York Times (published on 15 February 2018) referred to the “engineering experts” on the Fitzgerald study. The study was, of course, not conducted by engineering experts at all, yet the damage to our College has already been done.

Since I did not start in my current position until August, 2017, after the Fitzgerald testing had been completed and the letter had been sent to Dianne Black, I first learned about this issue via a Nov. 10, 2017 article in the Washington Post. As more negative press and questions began arising in the national and local media, I became increasingly concerned as I learned more about the details of the testing and claims that had been made in the letter. On Dec. 22, 2018, in a cellphone conversation with President Oldham, I mentioned the fact that several faculty in the College had raised concerns in this regard. In a follow-up phone call the next day to his Chief of Staff, Lee Wray, I further emphasized that I did not believe that the University could defend this study. On Jan. 23, 2018, myself and Associate Dean Vahid Motevalli met with Lee Wray and Karen Lykins (Director of the Office of Communications & Marketing). During this meeting, we expressed our grave concerns about the Fitzgerald project, including the devastating five-page critique of the “flawed TTU study” that appeared in the public docket of the EPA by the Environmental Defense Fund (EPA-HQ-OAR-2014-0827) on January 5, 2018. I concluded the meeting by urging (almost begging) that the Administration immediately suspend support for the project, pending an internal investigation. In a follow-up meeting, with Chief of Staff Lee Wray on Jan. 26, 2018, he confirmed that he had delivered the message to the President, the President had considered my input, but that they also had other input supporting the study. On the following Monday, Jan. 29, 2018 the members of the Faculty Senate from the College of Engineering proposed a draft resolution to the Senate, which after modification, became the Faculty Senate Resolution that was approved by a vote of 33 to 1, and was sent to the President on Tuesday, Jan. 30, 2018. Item 2 in this Resolution stated: “Issue a letter, signed by the President, withdrawing all Tennessee Tech support from the study, pending the results of the aforementioned investigation”. In his response, the President declined to issue such a letter, and based on his email yesterday, Feb. 15, 2018, addressed to “Faculty/Staff”, he is maintaining that position.

I realize this memo and the facts that I have brought to light may be a “professional suicide” with regard to my position as Interim Dean. However, if that is what it takes to help force a more

active response from the University and stop the damage to the College, I do it willingly and without hesitation.





Office of the President

TENNESSEE TECH

February 19, 2018

Honorable Scott Pruitt
USEPA Headquarters
William Jefferson Clinton Building
1200 Pennsylvania Avenue, N. W.
Mail Code: 1101A
Washington, DC 20460

Reference: Tennessee Tech University – Summary of Heavy Duty Truck Study and Evaluation of the Phase II Heavy Duty Truck Rule

Mr. Pruitt:

Please be advised that regarding the “Environmental & Economic Study of Glider Kit Assemblers” report, knowledgeable experts within the University have questioned the methodology and accuracy of the report. Therefore, Tennessee Tech University is actively pursuing a peer review of the report and supporting data to assure its validity. The University also is investigating an allegation of research misconduct related to the study. We request that you withhold any use or reference to said study pending the conclusion of our internal investigations.

We sincerely regret any inconvenience this imposes, but our aim is to ensure the absolute integrity and objectivity of any scholarly product of Tennessee Tech. We anticipate a timely and thorough review following which we will inform you of the outcome. Thank you for your assistance and patience as we work through the concerns raised.

Sincerely,

Philip B. Oldham

PBO/ds



Office of the President

TENNESSEE TECH

February 19, 2018

The Honorable Diane Black
1131 Longworth HOB
Washington, DC 20515

Reference: Tennessee Tech University – Summary of Heavy Duty Truck Study and Evaluation of the Phase II Heavy Duty Truck Rule

Congressman Black:

Please be advised that regarding the “Environmental & Economic Study of Glider Kit Assemblers” report, knowledgeable experts within the University have questioned the methodology and accuracy of the report. Therefore, Tennessee Tech University is actively pursuing a peer review of the report and supporting data to assure its validity. The University also is investigating an allegation of research misconduct related to the study. We request that you withhold any use or reference to said study pending the conclusion of our internal investigations.

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Sincerely,

Philip B. Oldham

PBO/ds



Office of the President

TENNESSEE TECH

February 19, 2018

Mr. Tommy C. Fitzgerald
Fitzgerald Glider Kits
575 Technology Dr.
Sparta, TN 38583

Reference: Tennessee Tech University – Summary of Heavy Duty Truck Study and Evaluation of the Phase II Heavy Duty Truck Rule

Mr. Fitzgerald:

Please be advised that regarding the “Environmental & Economic Study of Glider Kit Assemblers” report, knowledgeable experts within the University have questioned the methodology and accuracy of the report. Therefore, Tennessee Tech University is actively pursuing a peer review of the report and supporting data to assure its validity. The University also is investigating an allegation of research misconduct related to the study. We request that you withhold any use or reference to said study pending the conclusion of our internal investigations.

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Sincerely,

Philip B. Oldham

PBO/ds



Joseph M. DePew
(931) 881-3893 (p)
(931) 210-6925 (f)
jdepew@fitzgeraldtrucksales.com

February 26, 2018

VIA CERTIFIED MAIL
VIA ELECTRONIC MAIL

Philip B. Oldham
President
Tennessee Tech University
1 William L. Jones Dr
Cookeville, Tennessee 38505
poldham@tntech.edu

Kae Carpenter
University Counsel
Tennessee Tech University
1 William L. Jones Dr
Cookeville, Tennessee 38505
kcarpenter@tntech.edu

**Re: Demand for Preservation of Documents Related to Glider Emissions Study
and Fitzgerald Glider Kits**

Dear President Oldham and Ms. Carpenter:

As you no doubt are aware, in 2016 Fitzgerald Glider Kits (“FGK”) approached Tennessee Tech University (“TTU”) with the idea of sponsoring research related to a U.S. Environmental Protection Agency rule entitled “Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles—Phase 2.” TTU accepted FGK’s proposal. The research, which began in or around June 2016 and was conducted by several individuals who are copied on this letter, involved testing emissions from FGK-rebuilt engines and new OEM engines and performing an economic impact study related to FGK’s business (the “Study”). The first phase of the Study was completed in late 2016, and the second phase was completed in late 2017.

The Study is protected from disclosure under Tenn. Code Ann. § 49-7-120(b). TTU officials have represented publicly and privately that the Study has not been disclosed. Nevertheless, certain members of the TTU faculty and administration have publicly called into question the accuracy and validity of the Study. Some of those individuals are copied on this letter. If it is true that TTU has complied with Tenn. Code Ann. § 49-7-120(b) (and we currently have no reason to believe otherwise), it must also be true that most of the members of the faculty and administration who have casted doubt on the Study have not actually reviewed it.

The Study is now the subject of an internal “misconduct in research” investigation. In a February 19, 2018 letter addressed to Tommy C. Fitzgerald, President Oldham instructed FGK to “withhold any use or reference to said study pending the conclusion of [TTU’s] internal investigations.” As the Study’s sponsor, FGK is faced with one of two possibilities:

- (1) the Study, which FGK did not take part in, is flawed or involved some sort of misconduct; or
- (2) the Study is valid, and the criticism of the Study is unfounded.

FGK has no reason to believe that the Study is in any way inaccurate or invalid. To be sure, we do not have engineers or scientists on staff and we lack the ability to perform the type of research that the Study called for. TTU represented to FGK that the university was fully capable of conducting the Study, and our funding of the Study was predicated on those representations.

We were surprised to learn that the principal investigator (PI) of the Study, Dr. Benjamin Mohr, the Chair of TTU’s Civil and Environmental Engineering Department, was the research misconduct complainant. We also understand that Dr. Mohr is now claiming that his involvement in the Study was minimal. That the PI assigned to the Study is attempting to distance himself from the Study is concerning.¹ TTU represented to FGK not only that it was capable of conducting the Study, but also that a PI would be involved in the Study.

FGK expected, like any other sponsor of funded research would reasonably expect, properly conducted research and findings that it could rely on. We did not expect to receive work product that some have characterized as “flawed and shoddy” or “farfetched and scientifically implausible,” and we certainly did not expect to be defamed by faculty members and administrators from the very institution that conducted the research. These faculty members and administrators have attacked the Study for the ostensible purpose of protecting TTU’s reputation. We appreciate that there may be other motivations. Whatever the intent, these public statements have damaged the business and reputation of FGK and the Fitzgerald family.

We hereby demand that TTU preserve all documents in its possession, custody or control, whether in paper or electronic form, which relate to the Study or FGK. Such documents would include, but would not be limited to, documents tending to show that the Study is flawed, shoddy, inaccurate, untruthful or scientifically implausible. If it is determined that the Study is any one of those things, then TTU’s conduct during the course of the Study, as opposed to the statements of certain faculty members and administrators, will have been the cause of the damage to FGK and the Fitzgerald family.

¹ As the sponsor of the Study, FGK reviewed some of TTU’s files related to the Study as part of TTU’s effort to respond to a public records request. Those files reflect several instances where Dr. Mohr gave written approvals and received funded research payments through the end of 2017, when the Study was completed.

February 26, 2018

Page 3

If you have any questions, please call me at (931) 881-3893.

Sincerely,



Joseph M. DePew
General Counsel

cc: Tommy C. Fitzgerald, Fitzgerald Glider Kits (*via e-mail*)
Thomas Brewer, Associate Vice President, Strategic Research Initiatives,
Tennessee Tech University (*via e-mail*)
Mark Davis, Academic Support Associate, Civil & Environmental Engineering,
Tennessee Tech University (*via e-mail*)
Darrell Hoy, Ph.D., Interim Dean, College of Engineering,
Tennessee Tech University (*via e-mail*)
Christy Killman, Faculty Senate President, Tennessee Tech University (*via e-mail*)
Karen Lykins, Chief Communication Officer, Tennessee Tech University (*via e-mail*)
Benjamin Mohr, Ph.D., Chair & Associate Professor, Civil & Environmental
Engineering, Tennessee Tech University (*via e-mail*)
Andrew Smith, Professor, English Department, Tennessee Tech University (*via e-mail*)
Bharat Soni, Ph.D., Vice President for Research & Economic Development,
Tennessee Tech University (*via e-mail*)

March 9, 2018

The Honorable Scott Pruitt
Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460

Dear Mr. Pruitt:

The Environmental Protection Agency is required to rely on sound science and information as it carries out its mission. This is the public's expectation and the responsibility vested in the EPA by the Clean Air Act and other environmental laws.

Throughout our tenures as Administrators, our policy decisions were centered on the best available research and scientific protocols. We are deeply troubled that the Agency's steadfast commitment to public health and environmental protection based on the best available science is being undermined – putting at risk air and water quality and endangering children and families.

As EPA's latest strategic plan emphasized, it is important that EPA use “the best available science and research to address current and future environmental hazards.”¹ EPA's Scientific Integrity Policy similarly underscores that “[s]cience is the backbone of the EPA's decision-making” and that “[t]he environmental policies, decisions, guidance, and regulations that impact the lives of all Americans every day must be grounded, at a most fundamental level, in sound, high quality science.”² These measures help ensure that EPA is informed by the best available information and able to share accurate information with the public about the implications of its decisions.

We write express our concern that EPA has failed to rely on the best scientific analysis in the recent proposal to repeal standards limiting pollution from heavy-duty glider trucks. Recent news reports indicate that a Tennessee Technological University study that EPA's proposal referenced and was informed by is now under investigation for potential research misconduct. Not only does it appear that the Tennessee Tech study failed to follow proper research protocol, the conclusions of the study are contrary to a well-established understanding of the pollution from older diesel engines. Tennessee Tech's president submitted a letter requesting that EPA withdraw “any use or reference” to its study until the investigations are complete, noting that “knowledgeable experts within the University have questioned the methodology and accuracy of

¹ U.S. E.P.A., FY 2018-2022 EPA Strategic Plan, Feb. 12, 2018, pg. 7, available at <https://www.epa.gov/sites/production/files/2018-02/documents/fy-2018-2022-epa-strategic-plan.pdf>.

² U.S. E.P.A., Scientific Integrity Policy, 2012, available at https://www.epa.gov/sites/production/files/2014-02/documents/scientific_integrity_policy_2012.pdf.

the report.”³ In light of the serious questions raised about the study, we urge you withdraw the glider proposal.

America has made tremendous progress in addressing dangerous pollution from heavy-duty diesel trucks. At the same time, the glider industry has emerged, using a loophole to evade otherwise universal pollution standards and changing from a niche to replace collision-damaged trucks to a large industry reselling rebuilt high polluting 1999-2002 engines in new truck bodies. These vehicles have enormous pollution consequences: in 2016, EPA estimated that glider “NOX and PM emissions 20-40 times higher than current engines. If miscalibrated, emissions could be even higher”⁴—and more recent testing has identified even higher potential emission levels.⁵ In 2016, EPA put into place a commonsense solution requiring that glider trucks meet the same emission standards that apply to all other new heavy-duty trucks. The glider industry’s petition for administrative review of this solution challenged the 2016 emission assumptions based on the Tennessee Tech study, and EPA’s proposal to revoke these protections similarly referenced and incorporated the Tennessee Tech study’s claims that glider trucks do not, in fact, have disproportionately high emissions levels.

The emissions research at issue in the Tennessee Tech study is central to understanding the impacts of the proposed glider repeal. It is crucial that EPA’s consideration of this proposal—which has such potentially significant implications for air pollution emissions and air quality—is informed by the best available research and information on the issue of pollution impacts. By Tennessee Tech’s own public admission, in this case EPA was informed by a flawed study that does not meet the high ethical standards for scientific analysis required by the Clean Air Act. EPA has a responsibility to ground its decisions in high-quality science, and to make this information transparent to the public so that stakeholders can fairly understand this proposal’s implications.

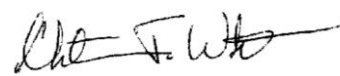
The integrity of the Environmental Protection Agency’s progress in reducing heavy-duty truck pollution is at stake. EPA would be basing a rulemaking—which could have such profound negative health impacts on the American people—on a flawed analysis. We urge you to withdraw the glider proposal.

Sincerely,

Carol M. Browner



Christine Todd Whitman



³ Letter from Tennessee Technological University President Philip Oldman to EPA Administrator Scott Pruitt, Feb. 19, 2018.

⁴ <https://nepis.epa.gov/Exe/ZyPDF.cgi/P100P8IS.PDF?Dockey=P100P8IS.PDF> p 1960

⁵ HD Chassis Glider Final Report 11202017 <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-2417> p. 3



March 11, 2018

VIA ELECTRONIC SUBMISSION

The Honorable E. Scott Pruitt
Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Ave., N.W.
Washington, DC 20460

Attn: EPA-HQ-OAR-2014-0827

RE: Third Supplemental Comment of Environmental Defense Fund on the Environmental Protection Agency’s Proposed Rule, Repeal of Emission Requirements for Glider Vehicles, Glider Engines, and Glider Kits, 82 Fed. Reg. 53,442 (November 16, 2017)

The Environmental Defense Fund (“EDF”) respectfully submits this supplemental comment on the Environmental Protection Agency’s (“EPA”) Proposed Rule, *Repeal of Emission Requirements for Glider Vehicles, Glider Engines, and Glider Kits*, 82 Fed. Reg. 53,442 (November 16, 2017) (“Proposed Rule”), addressing provisions contained in the agency’s 2016 final rule, *Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles—Phase 2*, 81 Fed. Reg. 73,478 (October 25, 2016) (“Phase 2 Standards”). New information has emerged indicating that from the outset of the public comment period, EPA had access to the underlying test report and data for a study cited in the Proposed Rule, yet the agency did not release any of that information to the public until after the comment period closed. The test report was placed in the docket late and with emissions data redacted, without any explanation but apparently due to the preference of an industry stakeholder. In light of the further evidence that this rulemaking is fundamentally flawed, we again call upon EPA to withdraw its proposal.

As stated in our prior supplemental comments of February 14 and February 27, 2018, EPA’s Proposed Rule cites to a study¹ performed by Tennessee Technological University (“TTU”) and

¹ U.S. EPA, Proposed Rule: *Repeal of Emission Requirements for Glider Vehicles, Glider Engines, and Glider Kits*, 82 Fed. Reg. 53,442, 53,444 (Nov. 16, 2017).

funded by Fitzgerald Glider Kits.² According to a summary document, the TTU study—overseen by Associate Vice President of Research Tom Brewer at a Fitzgerald facility—purported to conclude that remanufactured glider engines performed equally as well or outperformed modern engines with regard to pollutant emissions.³ These results are at odds with both recent EPA testing of glider vehicles and emission factors for the model year diesel engines that glider vehicles use, which show that uncontrolled glider vehicles have nitrogen oxide and particulate matter pollution emissions many multiples greater than other new freight trucks.⁴

EPA explicitly discussed the TTU study and summarized the study’s conclusions, without critical assessment, in its Proposed Rule to repeal emission requirements for glider vehicles.⁵ The Proposed Rule did not cite to any other analyses purporting to address the proposal’s health or environmental impacts.⁶

Documents obtained by the Southern Environmental Law Center through a public records request under Tennessee law indicate that TTU released the test report with emissions data underlying its study to EPA as early as November 17, 2017, but maintained that EPA not release the information to the public because of the university’s agreement with the company sponsoring the research, Fitzgerald Glider Kits.⁷ EPA did not submit any of this information into the docket during the comment period, which closed on January 5, 2018. On January 9, 2018, the agency posted to the docket a version of the test report with all emissions data redacted.⁸ EPA has not provided any explanation for the delay, nor for why emissions information that underlies discussion in its Proposed Rule was not made available to the public for review and comment, and even now remains unavailable for public review.

² Tenn. Tech. University Office of Research, Tennessee Technological University Annual Report 2015-16 (Volume 2) 42 (2016), available at https://www.tntech.edu/assets/userfiles/resourcefiles/13847/1476976572_2015-16%20Annual%20Report_FINAL.pdf; Tenn. Tech. University, Grants Rewarded Report (09/01/2016 – 09/30/2016), available at https://www.tntech.edu/assets/userfiles/resourcefiles/9512/1481215150_Grants%20Awarded%20Sept%202016.pdf; Tenn. Tech. University, Academic Affairs Highlights 25 (2017), available at https://www.tntech.edu/assets/usermedia/provost/12546/2017_End_of_the_Year_Statement.pdf.

³ July 10, 2017 Petition for Reconsideration of Application of the Final Rule Entitled “Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles—Phase 2 Final Rule” to Gliders, from Fitzgerald Glider Kits, LLC; Harrison Truck Centers, Inc.; and Indiana Phoenix, Inc. (July 10, 2017), EPA–HQ–OAR–2014–0827, Exhibit 1, available at <https://www.epa.gov/sites/production/files/2017-07/documents/hd-ghg-fr-fitzgerald-recons-petition-2017-07-10.pdf>.

⁴ U.S. EPA, Chassis Dynamometer Testing of Two Recent Model Year Heavy-Duty On-Highway Diesel Glider Vehicles (Nov. 20, 2017), Docket No. EPA-HQ-OAR-2014-0827-2417, available at <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-2417>; EPA Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles - Phase 2, Response to Comments for Joint Rulemaking, at 1960-68, 1965, Appendix A (Aug. 2016), available at <https://nepis.epa.gov/Exe/ZyPDF.cgi/P100P8IS.PDF?Dockey=P100P8IS.PDF>.

⁵ 82 Fed. Reg. at 53,444.

⁶ See *id.*

⁷ See attached TTU Document Production.

⁸ Docket ID EPA-HQ-OAR-2014-0827-4804, “Redacted 11-17-17 Email from Tom Brewer with Follow-Up,” (posted Jan. 9, 2018), available at <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-4804>.

As we articulated in joint comments on the Proposed Rule submitted together with the Environmental Law and Policy Center and WE ACT for Environmental Justice,⁹ Section 307(d)(3) of the Clean Air Act requires that EPA provide notice in the proposed rule of “the factual data on which the proposed rule is based,” “the methodology used in obtaining the data and in analyzing the data,” and the “major ... policy considerations underlying the proposed rule.” All these data and documents are to be included in the docket on the date of proposal.¹⁰ The newly-obtained documents indicating EPA has had this emissions information since early November, yet has failed to fully disclose it and provided no explanation for its delay and withholding, further underscore the flawed nature of EPA’s rulemaking.

Because the TTU study is the only information in the proposal that purports to address the health and environmental impacts of repealing the 2016 glider vehicle emissions limits, information related to the legitimacy of the study is of particular importance. These developments provide further reason why, as our earlier comments urged, EPA must withdraw its flawed repeal proposal.

Sincerely,

Alice Henderson
Erin Murphy
Martha Roberts

Environmental Defense Fund
1875 Connecticut Ave., NW
Suite 600
Washington, DC 20009
(202) 387-3500

⁹ Comment of EDF, ELPC, & WE ACT on EPA’s Proposed Rule, *Repeal of Emission Requirements for Glider Vehicles, Glider Engines, and Glider Kits*, 82 Fed. Reg. 53,442 (Jan. 10, 2018), at Part VII(d), available at <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-4861>.

¹⁰ 42 U.S.C. § 7607(d)(3)(C).

FW: Tennessee Tech University - Follow Up

Brewer, Tom

Mon 2/12/2018 3:39 PM

To: Lykins, Karen <KLykins@tntech.edu>

Thomas Brewer
Associate Vice President

Executive Director
TCIM – Tennessee Center for Intelligent Mobility



From: Brewer, Tom
Sent: Tuesday, December 12, 2017 10:25 AM
To: 'Charmley, William' <charmley.william@epa.gov>
Cc: Cullen, Angela <cullen.angela@epa.gov>; Nelson, Brian <nelson.brian@epa.gov>; Carpenter, Kae <kcarpenter@tntech.edu>; Soni, Bharat <bsoni@tntech.edu>; Wray, Lee <lwrays@tntech.edu>
Subject: RE: Tennessee Tech University - Follow Up

Bill Thank you for your email.

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Thomas Brewer
Associate Vice President

Executive Director
TCIM – Tennessee Center for Intelligent Mobility



From: Charmley, William [<mailto:charmley.william@epa.gov>]
Sent: Friday, December 08, 2017 3:22 PM
To: Brewer, Tom <TBrewer@tntech.edu>
Cc: Cullen, Angela <cullen.angela@epa.gov>; Nelson, Brian <nelson.brian@epa.gov>
Subject: RE: Tennessee Tech University - Follow Up

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Can you please let us know if that is acceptable to TTU?

Please note that next week, December 11-15, I will not be in the office. If you have any questions you can respond to this mail, and Angela or Brian can follow up with you.

Best regards,

Bill

Bill Charmley
Director
Assessment and Standards Division
Office of Transportation and Air Quality
U.S. Environmental Protection Agency

National Vehicle and Fuel Emissions Laboratory
2000 Traverwood Drive
Ann Arbor, MI 48105

desk ph. 734-214-4466
cell ph. 734-545-0333
e-mail: charmley.william@epa.gov

From: Brewer, Tom [<mailto:TBrewer@tntech.edu>]
Sent: Friday, November 17, 2017 3:43 PM
To: Charmley, William <charmley.william@epa.gov>
Subject: Tennessee Tech University - Follow Up

Bill Per your request for the TTU Heavy Duty Truck Emissions Field Testing results please see the attached details of the data for the (15) vehicles.

And to follow up from our Conference Call, the minutes you sent for us to review are accurate !

Lastly, TTU is requesting two pieces of information from the EPA :

- Ø Specifications (Cetane Rating etc) for the Fuel used in Emissions Testing at the EPA Ann Arbor Lab
- Ø How many / What Make and Model of Glider Kits are you currently testing ?

Thank you so much and don't hesitate contacting me for further information.

Thomas Brewer
Associate Vice President

Executive Director

TCIM – Tennessee Center for Intelligent Mobility



Tennessee
TECH

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Executive Director
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Sent: Friday, December 08, 2017 3:22 PM
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Office of Transportation and Air Quality
U.S. Environmental Protection Agency

National Vehicle and Fuel Emissions Laboratory
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desk ph. 734-214-4466
cell ph. 734-545-0333
e-mail: charmley.william@epa.gov

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Sent: Tuesday, December 12, 2017 11:25 AM
To: Charmley, William <charmley.william@epa.gov>
Cc: Cullen, Angela <cullen.angela@epa.gov>; Nelson, Brian <nelson.brian@epa.gov>; Carpenter, Kae <kcarpenter@tntech.edu>; Soni, Bharat <bsoni@tntech.edu>; Wray, Lee <lwray@tntech.edu>
Subject: RE: Tennessee Tech University - Follow Up

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Thomas Brewer

Associate Vice President

Executive Director

TCIM – Tennessee Center for Intelligent Mobility





Heavy Duty Vehicle Emissions Testing Cycle Results - Nitrogen Oxide (NOx)

Purpose : Gather Field Test Emissions Data to compare Glider Kits Remanufactured Engines versus OEM 'Certified' Engines

Vehicle	Engine	Test Date	Mileage	Type	Model Yr	NOx (g / HP * hr)	S Cycle Avg
1	Detroit Diesel Series 60 12.7 Liter	09/19/16	52	RelMan	Pre 2003		
2	Detroit Diesel Series 60 12.7 Liter	09/19/16	655,419	RelMan	Pre 2003		
3	Detroit Diesel Series 60 12.7 Liter	09/22/16	52	RelMan	Pre 2003		
4	Detroit Diesel Series 60 12.7 Liter	09/22/16	68	RelMan	Pre 2003		
5	Detroit Diesel Series 60 12.7 Liter	10/17/16	63	RelMan	Pre 2003		
6	Detroit Diesel Series 60 12.7 Liter	10/17/16	63	RelMan	Pre 2003		
7	Detroit Diesel DD15	11/09/16	63	RelMan	2007		
8	Caterpillar CT 3	11/09/16	67,958	RelMan	Pre 2003		
9	Detroit Diesel DD15	11/29/16	375	OEM	2017		
10	Detroit Diesel DD15	11/29/16	375	OEM	2017		
11	Detroit Diesel DD15	11/29/16	384	OEM	2017		
12	Detroit Diesel DD15	11/29/16	378	OEM	2017		
13	Detroit Diesel DD15	11/29/16	356	OEM	2017		
14	Volvo D13	09/27/17	700,000	OEM	2014		
15	Volvo D13	10/16/17	250,721	OEM	2017		

REDACTED

Notes :

- > Field Tested (15) Heavy Duty Class 8 Vehicles for NOx / CO / Particulate Matter
- > (8) Remanufactured Engines vs (7) OEM 'Certified' Engines
- > Vehicles # 1 & 3 Same Truck ... # 1 with Small Turbocharger / # 3 with Large Turbocharger
- > Vehicle # 4 recorded unusable data except for 100% Load Test Cycle
- > 'Off the Lot' Representative Vehicle Samples / Low & High Mileage
- > All Vehicles Field Tested on common Chassis Dynamometer @ common Location
- > Uncontrolled Variables - Air Density / Ambient Temperature / Humidity / Fuel Mixture & Cetana Rating / Oil Type
- > Utilized EPA 40 CFR 1065 Field Test Procedures and (PEMS) Portable Emissions Measurement System

Prepared By:
Thomas Brewer
Executive Director
TN Center for Intelligent Mobility
Tennessee Tech University
Dated : 11 / 15 / 2017

Vehicle	Engine	Test Date	CO					5 State Avg
			Idle	Allowed	75%	100%	75%	
Truck, smaller turbo	Detroit Diesel Series 60 12 7 Liter	09/19/16						
ad1772	Detroit Diesel Series 60 12 7 Liter	09/19/16						
39251 ECU 2	Detroit Diesel Series 60 12 7 Liter	10/17/16						
39252 ECU 1	Detroit Diesel Series 60 12 7 Liter	10/17/16						
432833.00	Detroit Diesel DD15	11/09/16						
Post 2007 new 1	Detroit Diesel DD15	11/29/16						
Post 2007 new 2	Detroit Diesel DD15	11/29/16						
Post 2007 new 3	Detroit Diesel DD15	11/29/16						
Post 2007 new 4	Detroit Diesel DD15	11/29/16						
Post 2007 new 5	Detroit Diesel DD15	11/29/16						
Show truck, Large turbo	Detroit Diesel Series 60 12 7 Liter	09/22/16						
498201.00	Cat CT13	11/09/16						
Vohvo VNL 300 2K	Vohvo D13	09/27/17						

REDACTED

The purpose of this test was to gather preliminary data as to how close to certified vehicles glider kits are and to gather data to investigate how to improve their emissions.

Cells marked 0 are below detection threshold of 1 part per million mass

"N/A" is marked when the EPA documentation says "N/A" for a rating

HP is measured horsepower. An SAE recommended 85% mechanical efficiency is assumed

Data for gx7384 was unusable except for full load. All data for it is at full load

While the preliminary tests were as controlled as possible without disrupting daily activities, the following variables can change the resulting emissions:

- Air temperature
- Air density
- Humidity
- Wear
- Fuel is 'as driven'
- Fuel Temperature
- Oil type
- Ambient emissions
- Mechanical Efficiency
- Intake Irregularities
- Exhaust Irregularities

FW: Tennessee Tech Univ - Follow Up

Brewer, Tom

Mon 2/12/2018 3:19 PM

To: Lykins, Karen <KLykins@tntech.edu>;

📎 1 attachments (111 KB)

TCIM - HDV Emissions Test Procedure July 2016.docx;

Thomas Brewer
Associate Vice President

Executive Director
TCIM – Tennessee Center for Intelligent Mobility



From: Brewer, Tom
Sent: Tuesday, November 07, 2017 4:46 PM
To: Charmley, William <charmley.william@epa.gov>
Subject: Tennessee Tech Univ - Follow Up

Hey Bill ... enjoyed our conversation today don't hesitate contacting me if you need anything else.

See attached file that documents our Test Procedures and the links below for both the Chassis Dyno and Combustion Analyzer.



Thomas Brewer
Associate Vice President

Executive Director
CIM – Tennessee Center for Intelligent Mobility

2/13/2018

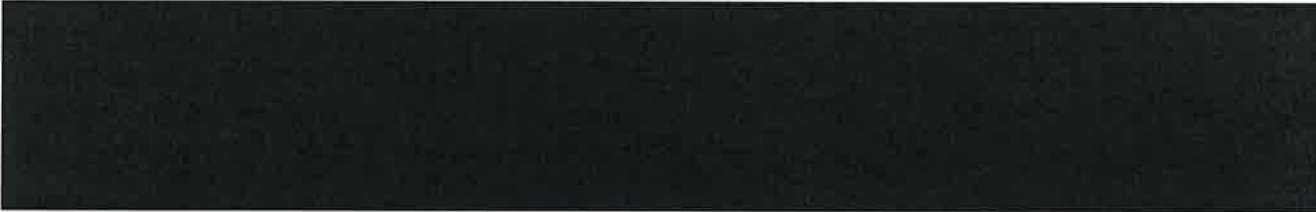
Mail - KLykins@tntech.edu

e-mail: charmley.william@epa.gov

From: Brewer, Tom [<mailto:TBrewer@tntech.edu>]
Sent: Tuesday, November 07, 2017 5:46 PM
To: Charmley, William <charmley.william@epa.gov>
Subject: Tennessee Tech Univ - Follow Up

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Thomas Brewer
Associate Vice President

Executive Director
TCIM – Tennessee Center for Intelligent Mobility



FW: Tennessee Tech University - Follow Up

Brewer, Tom

Mon 2/12/2018 3:40 PM

To: Lykins, Karen <KLykins@tntech.edu>

📎 2 attachments (862 KB)

Redacted 11-17-17 Email from Tom Brewer with Follow-Up.pdf; ATT00001.htm;

See attached

Thomas Brewer
Associate Vice President

Executive Director
TCIM – Tennessee Center for Intelligent Mobility



From: Brewer, Tom
Sent: Thursday, January 04, 2018 6:32 PM
To: Joe DePew [REDACTED]; [REDACTED]
Subject: Fwd: Tennessee Tech University - Follow Up

FYI ... I will send Joe's email address as the Research Sponsor contact to Bill Charmley.

Further, what does ' a redacted version' mean ?

Thanks
Tom B

Sent from my iPad

Begin forwarded message:

From: "Charmley, William" <charmley.william@epa.gov>
To: "Brewer, Tom" <TBrewer@tntech.edu>
Cc: "Carpenter, Kae" <kcarpenter@tntech.edu>, "Soni, Bharat" <bsoni@tntech.edu>, "Wray, Lee" <lwray@tntech.edu>
Subject: RE: Tennessee Tech University - Follow Up

Dear Tom,

If it is still possible for EPA to perform outreach to the sponsor of the TTU test program in order to find out if we can make the additional TTU emission test data available to the public, please let me know, as I would be happy to follow-up directly with the sponsor.

In the meantime, EPA's Office of General Counsel , the legal office within EPA, advised my team and I that we should place a redacted version of the TTU data into the public docket. This will make it clear that EPA has such data and we can consider the data in the context of the current glider rulemaking, but that per TTU's request, we are not releasing the detailed emissions test data.

A copy of the information we have placed into the public docket is attached.

Please let me know if you have any questions on this topic, and also your thoughts regarding EPA following up with the sponsor of this research program.

Best regards,

Bill

Bill Charmley
Director
Assessment and Standards Division
Office of Transportation and Air Quality
U.S. Environmental Protection Agency

National Vehicle and Fuel Emissions Laboratory
2000 Traverwood Drive
Ann Arbor, MI 48105

desk ph. 734-214-4466
cell ph. 734-545-0333
e-mail: charmley.william@epa.gov

From: Charmley, William
Sent: Thursday, December 21, 2017 4:49 PM
To: 'Brewer, Tom' <TBrewer@tntech.edu>
Cc: Cullen, Angela <cullen.angela@epa.gov>; Nelson, Brian <nelson.brian@epa.gov>; Carpenter, Kae <kcarpenter@tntech.edu>; Soni, Bharat <bsoni@tntech.edu>; Wray, Lee <lwrays@tntech.edu>
Subject: RE: Tennessee Tech University - Follow Up

Dear Tom,

Thank you for this response below regarding the additional test data. I was out of the office last week and I'm still catching up.

Is it possible I could ask the sponsor of the research program if the test data can be made available to the public?

Please let me know your thoughts on this.

Have a peaceful holiday.

Bill

Bill Charmley
Director
Assessment and Standards Division
Office of Transportation and Air Quality
U.S. Environmental Protection Agency

National Vehicle and Fuel Emissions Laboratory
2000 Traverwood Drive
Ann Arbor, MI 48105

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Associate Vice President

Executive Director
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 TECH_Logo_Horizontal_Purple_RGB

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Sent: Friday, December 08, 2017 3:22 PM
To: Brewer, Tom <TBrewer@tntech.edu>
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Subject: Tennessee Tech University - Follow Up

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**Tennessee
TECH**



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Purpose : Gather Field Test Emissions Data to compare Glider Kits Remanufactured Engines versus OEM 'Certified' Engines

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NOx (g /HP * hr)

REDACTED

Notes :

- > Field Tested (15) Heavy Duty Class 8 Vehicles for NOx / CO / Particulate Matter
- > (8) Remanufactured Engines vs (7) OEM 'Certified' Engines
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- > Uncontrolled Variables - Air Density / Ambient Temperature / Humidity / Fuel Mixture & Cetane Rating / Oil Type
- > Utilized EPA 40 CFR 1065 Field Test Procedures and (PEMS) Portable Emissions Measurement System

Prepared By:
 Thomas Brewer
 Executive Director
 TN Center for Intelligent Mobility
 Tennessee Tech University
 Dated : 11 /15 /2017

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Volvo VNL 300 2L	Volvo D13	09/27/17									

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- Air density
- Humidity
- Wear
- Fuel is 'as driven'
- Fuel Temperature
- Oil type
- Ambient emissions
- Mechanical Efficiency
- Intake irregularities
- Exhaust irregularities

United States Senate

WASHINGTON, DC 20510

March 12, 2018

The Honorable Scott Pruitt
Administrator
Environmental Protection Agency (EPA)
1200 Pennsylvania Ave., NW
Washington, DC 20004

Dear Administrator Pruitt:

We write to request information about EPA's November 16, 2017 proposal to repeal air emission standards for some of the dirtiest heavy-duty trucks on the road.¹ Glider trucks, also known as "zombie trucks,"² look like new trucks on the outside—and are advertised and sold as new—but are equipped with old, high-polluting diesel engines on the inside. According to internal agency research not released until *after* EPA published this proposal, a new 2017 glider truck can emit up to 450 times the particulate matter (PM) pollution, and up to 43 times the nitrous oxide (NO_x) pollution, of model year 2014 and 2015 trucks.³ Other EPA analyses concluded that, if left unregulated, glider vehicle emissions could prematurely kill thousands of people, and increase instances of lung cancer, chronic lung disease, heart disease, and severe asthma attacks.⁴ We are also deeply troubled that this proposal, which appears to largely benefit a single company, was influenced by an industry-funded "study" that is currently the subject of an official investigation into research misconduct for failing to adhere to basic scientific standards.⁵ We urge you to withdraw this dangerous, legally questionable proposal immediately.

EPA and the National Highway Traffic Safety Administration (NHTSA) have worked closely with states, vehicle manufactures, environmental groups, and other interested stakeholders to develop federal standards that reduce vehicle pollution and improve fuel-economy. An important focus of these regulations has been medium- and heavy-duty vehicles, which, despite constituting only 5% of the domestic vehicle fleet, produce 20% of all transportation-sector emissions. EPA and NHTSA finalized an initial round of greenhouse gas and fuel economy standards for these vehicles in 2011, avoiding 270 million tons of CO₂ emissions and saving consumers \$50 billion at the pump.⁶ In 2016, the agencies completed the second round of regulations ("Phase 2"), setting standards for these highly-polluting vehicles out to model year 2027. These carefully crafted rulemakings were the result of "more than 400 meetings with

¹ 82 Fed. Reg. 53,442 (Nov. 16, 2017).

² See Rachel Muncrief & Josh Miller, "Scott Pruitt's EPA wants to resurrect the dirty diesel," INTL. COUNCIL ON CLEAN TRANSP., Dec. 1, 2017, <https://www.theicct.org/blog/staff/glider-proposal-means-resurrecting-dirty-diesel>.

³ EPA NATL. VEHICLE & FUEL EMISSIONS LAB., "Chassis Dynamometer Testing of Two Recent Model Year Heavy-Duty On-Highway Diesel Glider Vehicles" (Nov. 20, 2017) at 3 [hereinafter "OTAQ Study"], <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-2417>.

⁴ Response to Comments at 1877, <https://nepis.epa.gov/Exe/ZyPDF.cgi/P100P8IS.PDF?Dockey=P100P8IS.PDF>.

⁵ <https://www.washingtonpost.com/news/energy-environment/wp/2018/02/21/tennessee-tech-withdraws-industry-funded-study-used-to-back-controversial-epa-truck-rule/>.

⁶ 76 Fed. Reg. 57,106 (Sept. 15, 2011).

manufacturers, suppliers, trucking fleets, dealerships, state air quality agencies, non-governmental organizations . . . and other stakeholders,” as well as feedback received from over 200,000 public comments, including in two public hearings.⁷ In contrast, EPA’s proposal, which exempts some of the worst-polluting trucks from being subject to air pollution limits, was reportedly developed at the behest of politically well-connected representatives of glider manufacturers.⁸

Glider trucks used to be a niche industry, with less than a thousand vehicles produced each year—primarily for engine-salvage purposes when relatively new trucks got in collisions. By 2015, however, “significantly over 10,000” glider vehicles were being sold, and almost every engine used to complete a glider truck is a rebuilt diesel engine originally manufactured between 1998 and 2002.⁹ These engines are so dirty that, during EPA testing conducted in late 2017, the black soot belching from glider trucks clogged the filters of EPA’s testing equipment, triggering a “PM equipment alarm” that prevented your technical staff from proceeding under normal testing conditions.¹⁰

EPA soon realized that, if left unregulated, by 2025 glider vehicles would create one-third of all NO_x and PM emissions from heavy-duty trucks, even though they would only comprise 5% of the heavy-duty tractor fleet. In its 2016 “Phase 2” medium and heavy-duty rule, after taking two rounds of public comment on whether and how to address glider vehicles, EPA finalized regulations that ensured the emissions from glider trucks would be reduced while minimizing disruption to the few companies that manufacture glider kits and vehicles.¹¹

Although no one from the glider industry challenged the final glider provisions in court, on May 8, 2017, you personally met with representatives of Fitzgerald Glider Kits, LLC (Fitzgerald),¹² the self-proclaimed, “largest glider kit dealer in the country”¹³ and a political supporter of President Trump.¹⁴ Two months after meeting with you, on July 10, 2017, Fitzgerald and two other glider kit dealers sent you a petition seeking reconsideration of the glider requirements.¹⁵ You also spoke later that month with Congresswoman Diane Black, who has vocally supported the Fitzgerald Petition.¹⁶

⁷ 81 Fed. Reg. 73,478, 73,481 (Oct. 25, 2016).

⁸ See, e.g., Eric Lipton, “How \$225,000 Can Help Secure a Pollution Loophole at Trump’s E.P.A.,” N.Y. TIMES, Feb. 15, 2018, <https://www.nytimes.com/2018/02/15/us/politics/epa-pollution-loophole-glider-trucks.html>.

⁹ See EPA memorandum from Charles Moulis to William Charmley, “Summary of Glider Production Data” (Nov. 15, 2017) at 1–3, https://www.eenews.net/assets/2017/11/21/document_gw_05.pdf.

¹⁰ OTAQ Study, *supra* note 3, at 14–15.

¹¹ See 81 Fed. Reg. at 73,941–46.

¹² “EPA Administrator Scott Pruitt’s schedule, from April 3, 2017 to Sept. 8, 2017,” WASH. POST, Sept. 22, 2017, <https://www.washingtonpost.com/apps/g/page/politics/epa-administrator-scott-pruitts-schedule-from-april-3-2017-to-sept-8-2017/2241/>.

¹³ See “About Fitzgerald,” FITZGERALD GLIDER KITS, <https://www.fitzgeraldgliderkits.com/about-fitzgerald/>.

¹⁴ See, e.g., Eric Lipton, “How \$225,000 Can Help Secure a Pollution Loophole at Trump’s E.P.A.,” N.Y. TIMES, Feb. 15, 2018, <https://www.nytimes.com/2018/02/15/us/politics/epa-pollution-loophole-glider-trucks.html>.

¹⁵ Fitzgerald Glider Kits, LLC, et al., “Petition for Reconsideration” July 10, 2017 [hereinafter “Fitzgerald Petition”], <https://www.epa.gov/sites/production/files/2017-07/documents/hd-ghg-fi-fitzgerald-recons-petition-2017-07-10.pdf>.

¹⁶ <https://black.house.gov/media/press-releases/epa-intends-roll-back-job-killing-regulation-hurting-small-business-owners>.

The Fitzgerald Petition lists three reasons why the glider truck industry should be exempt from modern pollution controls, most significantly that (1) EPA lacks statutory authority to regulate them; and that (2) a “recent study by Tennessee Technological University,” as well as other factors, demonstrate that EPA based its conclusions about glider vehicle emissions on “unsupported assumptions,” because glider vehicles actually performed as well or better from an emissions perspective than trucks with newer engines.¹⁷

On August 17, 2017, you sent letters to Fitzgerald and the other petitioners, saying that the petition raised “significant questions” about EPA’s legal authority “as well as the soundness of the EPA’s technical analysis” regarding glider emissions. You told the petitioners that EPA had, for both legal and technical reasons, “decided to revisit” the glider rules.¹⁸

On November 9, 2017, you signed the proposal to repeal emission standards for glider vehicles, glider engines, and glider kits, and it was published on November 16, 2017. The EPA proposal states that the basis for repeal would be a legal reinterpretation of Clean Air Act (CAA) definitions, even though you appeared to acknowledge that your reinterpretation would be contrary to the CAA’s plain language.¹⁹ As support for this strained interpretation of the law (which conflicts with Supreme Court precedent²⁰), EPA cites no legislative history or judicial precedent discussing congressional intent under the Clean Air Act. Instead, EPA’s legal case rests entirely on the Automobile Information Disclosure Act of 1958, a sixty-year-old law regulating the placement of stickers on automobile windows, which has nothing to do with either air pollution or heavy-duty trucks.²¹

Moreover, since EPA issued the proposal, serious questions have been raised about the Tennessee Tech study that had caused you to question “the soundness of the EPA’s technical analysis” and thus decide to revisit the glider rules.²² Whereas the technical information underlying the 2016 rule that EPA proposes to partially repeal was “based on a vast body of existing peer-reviewed work,” the only “science” cited by EPA’s proposal is the Tennessee Tech study, which claims that glider vehicles perform just as well—if not *better* than—vehicles with newer engines.

¹⁷ Fitzgerald Petition, *supra* note 15, at 3–4.

¹⁸ <https://www.epa.gov/sites/production/files/2017-08/documents/hd-ghg-phase2-fitzgerald-glidens-ltr-2017-08-17.pdf>.

¹⁹ 82 Fed. Reg. at 53,444–45 (citing CAA section 216(3)) (“Focusing solely on that portion of the statutory definition that provides that a motor vehicle is considered ‘new’ prior to the time its ‘equitable or legal title’ has been ‘transferred to an ultimate purchaser,’ a glider vehicle would appear to qualify as ‘new.’”).

²⁰ *See, e.g., Massachusetts v. EPA*, 549 U.S. 497, 532 (2007) (rejecting EPA’s narrow interpretation of “pollutant,” because Congress used broad definitional language in an “intentional effort to confer the flexibility necessary to forestall [] obsolescence,” so that EPA could apply overarching congressional intent to “changing circumstances and scientific developments,” including those Congress “might not have appreciated” specifically at the time).

²¹ 82 Fed. Reg. at 53,445–46.

²² <https://www.epa.gov/sites/production/files/2017-08/documents/hd-ghg-phase2-fitzgerald-glidens-ltr-2017-08-17.pdf>.

On February 16, 2018, the interim dean of the College of Engineering at Tennessee Tech lambasted the study's conclusions as "farfetched" and "scientifically implausible,"²³ and faculty called for an investigation into research misconduct.²⁴ It has since come to light that the study was not subject to peer review and was paid for by Fitzgerald Glider Kits.²⁵ Tennessee Tech has suspended its relationship with Fitzgerald, has launched an official investigation into research misconduct, and has asked you to disregard the study pending the outcome of that investigation.

There are ample reasons why EPA should suspect that the Tennessee Tech research was not conducted appropriately. The study was advertised as a product of Tennessee Tech's "Department of Civil and Environmental Engineering,"²⁶ despite the fact that it was apparently not overseen, written, reviewed, or verified by any "qualified, credentialed engineering faculty member."²⁷ And although the university president wrote a letter saying that all glider trucks "met the standard" for particulate matter,²⁸ study participants spoke by phone with EPA technical staff on November 7, 2017 and admitted they had taken no numerical measurements of PM emissions—in fact, *they had not collected PM samples at all.*²⁹

The College of Engineering's interim dean also highlighted a "devastating" critique of the study by the Environmental Defense Fund,³⁰ which noted among other things that the research was conducted at a Fitzgerald-owned facility that does not appear to even have emissions-testing equipment that meets standard EPA testing procedures.³¹

Absent from EPA's proposal is any mention of the agency estimates that every 10,000 glider trucks can lead to the premature deaths of 1,600 people.³² Absent is the fact that a *single year* of glider vehicle sales produces more than 10 times the NO_x emissions of Volkswagen's entire criminal defeat-device scheme.³³ Absent is a November 2017 study by EPA technical staff, which found that glider trucks with Fitzgerald-rebuilt engines emitted up to 450 times the PM

²³ Memorandum from Darrel Hoy, Interim Dean, College of Engineering (Feb. 16, 2018) at 2 [hereinafter "Hoy Memorandum"], *available at* <https://www.documentcloud.org/documents/4378485-Combatting-Pollution-in-Diesel-Trucks-and-the.html#document/p217/a405776>.

²⁴ TENN. TECH. FACULTY SENATE, "Faculty Senate Resolution on Fitzgerald Research Study" (Jan. 30, 2018), https://www.tntech.edu/assets/usermedia/facultysenate/resolutions/Resolution_on_Fitzgerald_Study_1-30-2018.pdf.

²⁵ Kate Cook, "TTU investigating Fitzgerald study," HERALD-CITIZEN, Feb. 11, 2018, <http://herald-citizen.com/stories/ttu-investigating-fitzgerald-study,25943>.

²⁶ Letter from Phillip B. Oldham, President, Tenn. Tech. Univ., to Scott Pruitt, EPA Admin'r (Feb. 19, 2018) at 1.

²⁷ Hoy Memorandum, *supra* note 23, at 1–2.

²⁸ Letter from Phillip B. Oldham, *supra* note 26, at 1.

²⁹ Memorandum from George Mitchell, Mechanical Eng'r, Assessments & Standards Div., EPA Office of Transp. & Air Quality, "EPA Teleconference with Tennessee Tech University Regarding Glider Test Report Summarized in June 2017 Letter; Tennessee Tech University – Summary of Heavy Duty Truck Study and Evaluation of the Phase II Heavy Duty Truck Rule," Nov. 13, 2017 at 2–3, *available at* <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-2416>.

³⁰ Hoy Memorandum, *supra* note 23, at 2.

³¹ *See generally* Comments of EDF, ELPC, and WE ACT (Jan. 5, 2018) at 17–24, <https://www.edf.org/sites/default/files/content/EDF%20ELPC%20WE%20ACT%20Comments%20on%20Glidere%20Proposed%20Repeal%20final.pdf> [hereinafter "EDF Comment"].

³² Response to Comments at 1877, <https://nepis.epa.gov/Exe/ZyPDF.cgi/P100P8IS.PDF?Dockey=P100P8IS.PDF>.

³³ Muncrief & Miller, *supra* note 2.

pollution and 43 times the NO_x pollution of modern trucks.³⁴ Absent is the fact that, by 2025, EPA's proposal would undo—four times over—the interstate NO_x reductions achieved by power plants under the Cross-State Air Pollution Rule.³⁵ Absent are the economic costs that unrestricted glider vehicles impose on society, which EPA estimates at \$6 to \$14 billion *every year*.³⁶

In light of the severe adverse health effects of this rule, as well as the fact that EPA's decision-making relied on a study that was withdrawn pending the outcome of an official investigation into research misconduct, we ask that you immediately announce plans to withdraw this proposal. We additionally request that you please provide us with responses to the following questions and requests for information:

1. Please provide us with non-redacted copies of all documents (including but not limited to emails, memos, meeting notes and correspondence) regarding the November 16, 2017 proposed repeal of emission standards and other requirements for heavy-duty glider vehicles, glider engines, and glider kits. This request includes, *but is not limited to*:
 - a. all documents concerning any and all EPA scientific analysis conducted in relation to the proposed repeal;
 - b. all documents concerning any and all EPA legal analysis conducted in relation to the proposed repeal; and
 - c. any documents submitted by EPA to OMB in 2017 that describe the costs and benefits associated with the proposed repeal.
2. Please provide us with non-redacted copies of all documents (including but not limited to emails, memos, meeting notes and correspondence) between EPA representatives and representatives of Fitzgerald Glider Kits, LLC, Harrison Truck Centers, Inc., and/or Indiana Phoenix, Inc. since January 20, 2017. For the May 8, 2017 meeting with Administrator Pruitt and representatives of Fitzgerald Glider Kits, please provide me with a list of all people who attended that meeting (including by telephone) and with copies of any materials sent in advance or left behind with EPA personnel.
3. Please provide us with non-redacted copies of all documents written or received by EPA (including but not limited to emails, memos, meeting notes and correspondence) that relate to the Tennessee Tech's study on glider vehicle emissions, including, *but not limited to*, documents received from persons outside of EPA; any underlying data from the study;³⁷ and any concerns about the study raised by EPA technical staff.

³⁴ OTAQ Study, *supra* note 3, at 14–15.

³⁵ EDF Comment, *supra* note 31, at 11 & n.41.

³⁶ 81 Fed. Reg. at 73,943.

³⁷ *See, e.g.*, Email from William Charmley to Tom Brewer, "Re: TTU Follow-Up 11-28-2017," Dec. 1, 2017 (indicating EPA's possession of "more detailed emissions data" from Tennessee Tech, and ongoing EPA analyses), *available at* <https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0827-4272>.

4. Please provide us with non-redacted records of all meetings that EPA political appointees have taken with all individuals and corporations regarding the glider provisions of the Phase 2 Rule since January 20, 2017.
5. In October and November of 2017, EPA technical staff in the Office of Transportation and Air Quality (OTAQ) were conducting emissions testing on heavy-duty glider vehicles containing engines rebuilt by Fitzgerald.³⁸ The ultimate results of that research showed extraordinary levels of PM and NO_x pollution from those vehicles—directly contradicting the purported results of the Tennessee Tech study. Your proposal mentions the Tennessee Tech study, but makes no mention of the EPA technical study contradicting it. Your proposal was also published on November 16, 2017—four days before the OTAQ study was purportedly finalized (November 20), and six days before it was released to the public (November 22). Did you or any other political appointees know that OTAQ was conducting this study before it was finalized? If so, when were those political appointees aware of any final or preliminary results of the study?
6. Your August 17, 2017 letter to Fitzgerald Glider Kits states that Fitzgerald’s petition “raises concerns that the EPA relied upon ‘unsupported assumptions rather than data’ with regard to the emission impacts of glider vehicles” and that, “In light of these issues, the EPA has decided to revisit the provisions in the Phase 2 Rule that relate to gliders.” On what date on or before August 17, 2017, had EPA “decided to revisit” those provisions, and on what specific bases were those decisions made?
7. EPA concluded in 2016 that, if left unrestricted, emissions from heavy-duty glider tractors would represent “about one third of all NO_x and PM emissions from heavy-duty tractors in 2025.” Those excess emissions impose \$6 to \$14 billion in annual costs to society, and “removing even a fraction of these glider vehicles with high polluting engines from the road will yield substantial health benefits.”³⁹ Do you have any reason to doubt the veracity of these figures? If you do, please explain the reason(s) why, and provide supporting documentation.
8. Clean Air Act section 216(3) defines “new motor vehicle” as “a motor vehicle the equitable or legal title to which has never been transferred to an ultimate purchaser.”
 - a. As an initial matter, are glider vehicles motor vehicles? If no, please explain your answer and cite any provisions of the CAA upon which your answer relies.
 - b. If a glider vehicle has not been sold to any ultimate purchaser, has the equitable or legal title of that unsold glider vehicle been transferred to an ultimate purchaser?⁴⁰ If yes, please explain your answer and cite any provisions of the CAA upon which your answer relies.

³⁸ See OTAQ Study, *supra* note 3, at 4.

³⁹ 81 Fed. Reg. at 73,493.

⁴⁰ By “ultimate purchaser,” we refer to the definition in CAA section 216(5), 42 U.S.C. § 7550(5).

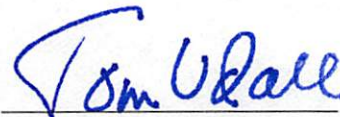
9. Hypothetically, imagine that a new Volvo dealer sells a brand new Volvo VNL heavy-duty truck⁴¹ to the vehicle's first ultimate purchaser. The Volvo VNL is straight off the assembly line, including with a brand new powertrain.
 - a. Would that Volvo VNL be a "new motor vehicle" under CAA section 216(3)? If your answer is anything other than "yes," please explain your answer and cite any provisions of the CAA upon which your answer relies.
 - b. Would the same Volvo VNL be a "new motor vehicle" under CAA section 216(3) if all characteristics from the hypothetical vehicle were the same, except that at the time of the sale the truck had i) pre-owned, refurbished tires salvaged from an older truck, or ii) a pre-owned, refurbished windshield installed?
10. Does the Automobile Information Disclosure Act of 1958, Pub. L. 85-506, contain any requirements applicable in any way to either air pollution or to heavy-duty commercial trucks? If yes, please provide a citation to those provisions.
11. Are the degree of emissions from glider trucks relevant in determining whether Congress intended to allow EPA to regulate emissions from new glider vehicles, glider kits, or rebuilt glider engines under the Clean Air Act? If yes, explain how emissions data influenced the proposal.
12. Are the human health consequences of glider truck emissions at all relevant in determining whether Congress intended to allow EPA to regulate emissions from new glider vehicles, glider kits, or rebuilt glider engines under the Clean Air Act? If yes, explain how human health considerations influenced the proposal.

Thank you very much for your attention to this important matter. Please provide your response no later than April 2, 2018. If you or members of your staff have further questions, please feel free to ask them to contact Michal Freedhoff at the Committee on Environment and Public Works at (202) 224-8832, or Jonathan Black with Senator Udall's office at (202) 224-6621.

Sincerely,



Senator Tom Carper
Ranking Member
U.S. Senate Committee on
Environment and Public Works



Senator Tom Udall
Ranking Member
U.S. Senate Subcommittee on the
Department of the Interior,
Environment, and Related Agencies

⁴¹ See "New VNL | Volvo Trucks USA," VOLVO, <https://www.volvotrucks.us/trucks/vnl/>.

United States Senate

WASHINGTON, DC 20510

March 16, 2018

The Honorable Scott Pruitt
Environmental Protection Agency
Office of the Administrator 1101A
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460

Dear Administrator Pruitt:

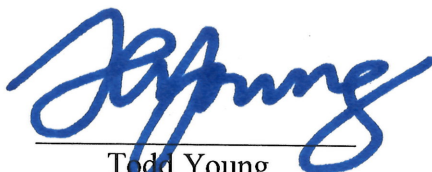
We write regarding the agency's ongoing efforts to streamline environmental regulations and ease the regulatory burden in the United States. While we welcome these necessary efforts, we maintain concerns with the Environmental Protection Agency's proposed rule for repeal of emission requirements for glider vehicles, glider engines, and glider kits. We believe that repealing those requirements will undermine the significant investments by American manufacturers, trucking fleets, and job creators.

We agree that regulations issued under the Clean Air Act (CAA) must not exceed the authority of Congress. However, we believe that repeal of these glider requirements will undermine the significant investments made by domestic manufacturers and the logistics industry. This view is shared by numerous stakeholders, including the manufacturers of the overwhelming majority of medium and heavy-duty vehicles, engines and emission control technologies sold throughout the United States. **Changing decades of consistent regulation erodes the bipartisan progress made under previous administrations and removes the regulatory certainty provided to the industry which has produced the next generation of cleaner, more efficient vehicles.**

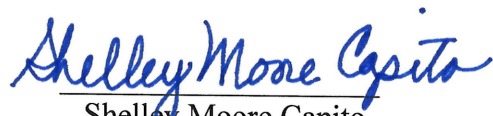
Our states are home to a strong industrial base that rely upon this regulatory certainty to successfully operate and invest billions each year in research and development. We urge you to consider the adverse impact on the economy if the authority to implement reasonable regulation of gliders is repealed and the regulatory certainty maintained through prior administrations is removed.

Thank you for your attention to this important matter and your continued dedication to protect American jobs and streamline burdensome environmental regulation.


Sincerely,



Todd Young
United States Senator



Shelley Moore Capito
United States Senator



Thom Tillis
United States Senator



Richard Burr
United States Senator

Congress of the United States
Washington, DC 20515

March 27, 2018

The Honorable Scott Pruitt
Administrator
Environmental Protection Agency
Office of the Administrator 1101A
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

Dear Administrator Pruitt:

We stand with you and welcome your continued efforts to streamline environmental regulations and repeal onerous and overreaching rules that the previous administration pushed through which hurt American industry. However, we write to raise concerns with the EPA's proposed rule for repeal of emission requirements for glider vehicles, glider engines, and glider kits. We believe that repealing those requirements will undermine the significant investments made by United States job creators and manufacturers.

We have seen what happens when overreaching and even illegal regulations are issued that go against the intent of the Clean Air Act. Regulations issued under the Clean Air Act must not exceed the authority Congress has provided. We believe that EPA still has the ability to work within this authority of the Clean Air Act to implement clear, concise, and straightforward rules regarding emissions from gliders. Eliminating this rule also runs the risk that a court would impose requirements beyond what the previous administration negotiated with industry, which could undermine the remanufacturing and rebuilding industries resulting in the loss of countless jobs across the United States.

We respectfully ask that you carefully consider the negative impacts if the authority to implement reasonable regulation of gliders is now repealed.

Sincerely,



Mark Sanford
Member of Congress



Evan Jenkins
Member of Congress



Larry Bucshon, M.D.
Member of Congress



Susan W. Brooks
Member of Congress

Congress of the United States
Washington, DC 20515



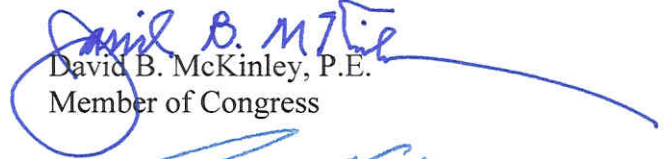
David Rouzer
Member of Congress



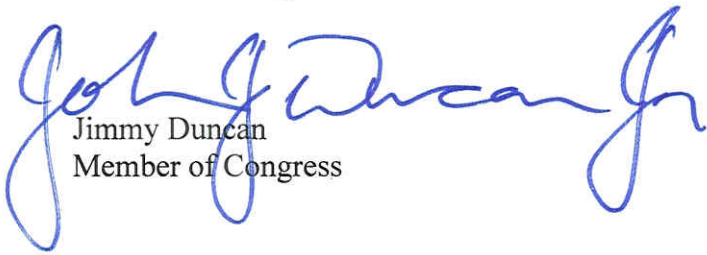
David Valadao
Member of Congress



Tom Emmer
Member of Congress



David B. McKinley, P.E.
Member of Congress



Jimmy Duncan
Member of Congress



Trey Hollingsworth
Member of Congress



Civil and Environmental Engineering

TENNESSEE TECH

TO: Dr. Philip Oldham, President
FROM: Dr. Benjamin Mohr, Department of Civil and Environmental Engineering
DATE: January 25, 2018
SUBJECT: Withdrawal as Principal Investigator

Effective immediately, I withdraw as the Principal Investigator of the current research project funded by Fitzgerald, along with any implicit support of statements that have been publicly released by the university. While my role has been largely administrative, I can no longer be associated in any way with this research project. I had no role in (nor prior knowledge of) the dissemination of results via letter by yourself and Mr. Tom Brewer, and subsequently included in an EPA petition. I have verbally expressed my displeasure regarding the matter to Mr. Brewer and the conflict of interest this has created. I indicated that this would likely lead to "bad press" and is not consistent with the typical release of information for industry-sponsored projects. All this time, I have been reassured that the university was working on a plan to combat the negative publicity and feedback. However, I can no longer sit back and wait for a response, which I may or may not agree with.

In addition, a graduate student has been caught in the middle of this dilemma. In early January, I (along with another member of the graduate student's committee) met with Mr. Brewer and stated that we do not support the student writing a thesis. A change from a thesis to non-thesis was largely due to our concerns over placing our names on what would ultimately become a public document. As such, concerns over the handling of data and the subsequent release have been made known over the past few months.

Back to the beginning when I agreed as PI in signing the project proposal (which I reviewed, but did not write), it was my understanding that the intent of the project was to perform relative comparisons of emissions from two classes of diesel engines (having had previously conducted research regarding NO_x, SO_x, and other environmental contaminants). Other portions of the project (e.g., legal issues and economic analysis) were subcontracted to other units within Tennessee Tech. The emissions data were never intended to be used as absolutes, nor directly compared to EPA standards. Any subsequent analyses regarding engine modifications, or similar, would then be conducted by qualified individuals in engine performance. Upon conclusion of the project, perhaps a peer-reviewed journal article would have been submitted. This is ultimately not how the results were used.

Furthermore, I was not given the opportunity to review any research reports prior to their submission to the industry sponsor. While I am listed as the PI at the top of the Phase I research report, I did not contribute nor review the report prior to dissemination. In addition, on the Phase II report, I am not listed as PI, instead Mr. Brewer is listed as PI (see attached). Again, I was not given the opportunity to comment on this report. While I do not necessarily refute the reports, I do not believe the conclusions drawn are objective or support statements made in the aforementioned letter and included in the EPA petition. In my opinion, this violates any and all academic and research principles, possibly including Tennessee Tech Policy 780.

I have done my best throughout my academic career to support the university to the best of my ability; however, I am an academic and have no interest in the political role this project has played. The reputation of the College of Engineering and myself have been damaged by our unwilling involvement in a political fight. While I have faith that the data collected is valid, the results have been misrepresented and improperly handled. As such, I am withdrawing as PI and I encourage the university to withdraw its public statements until further information can be gathered.



Civil and Environmental Engineering

TENNESSEE TECH

TO: Dr. Bharat Soni, Office of Research and Economic Development
FROM: Dr. Benjamin Mohr, Department of Civil and Environmental Engineering
DATE: January 27, 2018
SUBJECT: Violation of Tennessee Tech Policy 780 Misconduct in Research

Following my prior letter dated January 25, 2018 and sent to President Oldham, as requested, this letter serves as a formal allegation of research misconduct against Mr. Tom Brewer pursuant Tennessee Tech Policy 780. The research misconduct is in regards to the Fitzgerald Glider Kits industry sponsored project. I regret that this situation has elevated to this point, but it does not appear that the university is poised to stem the damage caused by these actions.

When I agreed as PI in signing the project proposal (which I reviewed, but did not write), the intent of the project was to perform *relative* comparisons of emissions from two classes of diesel engines (having had previously conducted research regarding NO_x, SO_x, and other environmental contaminants). This was to be a *preliminary* investigation guiding future research outside the scope of the original proposal. Other portions of the project (e.g., legal issues and economic analysis) were subcontracted to other units within Tennessee Tech. The emissions data were never intended as absolutes, nor directly comparable to EPA standards. Any subsequent analyses regarding engine modifications, or similar, would then be conducted by qualified individuals in engine performance. Upon conclusion of the project, perhaps a peer-reviewed journal article would have been submitted. Regardless, it was my intent that objective results would be submitted to the industry sponsor according to accepted practice. However, this is ultimately not what happened.

Per my letter on January 25, 2018, I have withdrawn as the Principal Investigator (PI) of the research project, along with any implicit support of statements that have been publicly released by the university. I had no role in (nor prior knowledge of) the dissemination of results via letter dated June 15, 2017 to Congressman Diane Black and signed by President Oldham and Mr. Brewer. I did not become aware of this letter until approximately November 1, 2017. I do not agree with statements made in this letter. The letter includes falsification by omissions of scope, methodology, and non-supporting data (e.g., NO_x). For example, the letter states "...research showed that optimized and remanufactured 2002-2007 engines and OEM certified engines performed equally as well and in some instances out-performed the OEM engines." While the data shown do appear to support this claim, NO_x results were completely omitted (i.e., falsification by omission). Lastly, the intent of the project was never to draw direct comparisons to EPA emissions, which the letter specifically states "[t]he results of the emissions test were compared with the 2010 EPA emissions standards..." as well as in Table 1, "NO_x: None of the vehicles met the standard." This is not simply a difference of opinion in the interpretation of results; this is a violation of research principles by misrepresenting (standard versus non-standard preliminary testing) and withholding data. I had verbally expressed my displeasure regarding the matter to Mr. Brewer and the conflict of interest this has created. I indicated that this would likely lead to "bad press" and is not consistent with the typical release of information for industry-sponsored projects. I should have withdrawn from this project earlier; yet, I have been reassured on multiple occasions that the university was working on a plan to combat the negative publicity and feedback, either by clarification of intent and scope or retraction of explicit support. For example, in response to an email inquiry, I forwarded the email to Mr. Brewer on 11/13/2017, which Dr. Soni ultimately forwarded to Karen Lykins with the statement, "...Karen will handle this request. [...] Karen will take care of that and follow-up." I do not take accusations against upper administrators lightly but was unsure of appropriate options, until the publication of Policy 780 on January 1, 2018. Additionally, I can no longer sit back and wait for a response, which by all accounts, I may not agree with. The longer the wait, the more damage occurs.

Furthermore, I was not given the opportunity to review any research reports prior to their submission to the industry sponsor. The Phase I report is undated but sent directly to Fitzgerald on December 23, 2016 (I was carbon copied on the email). While listed as the PI at the top of the Phase I research report, I did not contribute nor review the report prior to dissemination. At the time, this did not appear to be a significant issue as I was aware of the research activities and did not necessarily refute the preliminary results included. In the year between reports, I became increasingly concerned, and voiced these concerns, about the focus of Mr. Brewer on turning this project into a political matter.

More recently, on the Phase II report (dated 12/7/2017 and received via carbon copy on 12/8/2017), Mr. Brewer listed himself as PI (see attached). It is unknown why Mr. Brewer listed himself as PI as I had not yet explicitly withdrawn from the project. Regardless, this is, again, misrepresentation. This is still a significant deviation from commonly accepted practices in reporting research. In addition, there may be other cases of upper administrators listed as PIs instead of faculty on research proposals/reports without the permission of the actual PI.

Regardless of legal data ownership, I believe all faculty PIs expect university personnel, particularly upper administration, to be good stewards of data and subsequent research projects. Erosion of trust due to misuse, manipulation, and/or misrepresentation of data without the consent of faculty is catastrophic to every faculty and the university as a whole. Right now, Tennessee Tech is facing unprecedented negative exposure. The misuse of results to support political opinions is a dangerous precedent that should worry all university employees. This has caused potentially irreparable damage to the university, the College of Engineering, as well as my own reputation.

In conclusion, because there will be, at a minimum, perceived conflict of interest between Mr. Brewer, yourself, and possibly other upper administrators, I highly encourage the appointment of an external investigator for these claims.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

July 6, 2018

OFFICE OF
ENFORCEMENT AND
COMPLIANCE ASSURANCE

MEMORANDUM

SUBJECT: Conditional No Action Assurance Regarding Small Manufacturers of Glider Vehicles

FROM: Susan Parker Bodine *Susan Parker Bodine*
Assistant Administrator
Office of Enforcement and Compliance Assurance

TO: Bill Wehrum
Assistant Administrator
Office of Air and Radiation

Pursuant to your attached request of July 6, 2018, I am today providing a “no action assurance” relating to: (1) those small manufacturers to which 40 C.F.R. § 1037.150(t) applies that either are manufacturing or that have manufactured glider vehicles in calendar year 2018 (Small Manufacturers); and (2) to those companies to which 40 C.F.R. § 1037.150(t)(1)(vii) applies that sell glider kits to such Small Manufacturers (Suppliers).

As noted in your memorandum, in conjunction with EPA’s having promulgated in 2016 the final rule entitled Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles—Phase 2, *see* 81 Fed. Reg. 73,478 (Oct. 25, 2016) (the HD Phase 2 Rule), the Agency specified that glider vehicles were “new motor vehicles” (and glider vehicle engines to be “new motor vehicle engines”) within the meaning of 42 U.S.C. § 7550(3). Effective January 1, 2017, Small Manufacturers were permitted to manufacture glider vehicles in 2017 in the amount of the greatest number produced in any one year during the period of 2010–2014 without having to meet the requirements of 40 C.F.R. § 1037.635 (Interim Allowance). After this transitional period, beginning on January 1, 2018, small manufacturers of glider vehicles have been precluded from manufacturing more than 300 glider vehicles (or fewer, if a particular manufacturer’s highest annual production volume between 2010 and 2014 had been below 300 vehicles), unless they use engines that comply with the emission standards applicable to the model year in which the glider vehicle is manufactured. On November 16, 2017, EPA published a notice of proposed rulemaking, proposing to repeal the emissions standards and other requirements of the HD Phase 2 Rule as they apply to glider vehicles, glider engines, and glider kits. *See* 82 Fed. Reg. 53,442 (Nov. 16, 2017) (November 16 NPRM).

We understand that after taking into consideration the public comments received, and following further engagement with stakeholders and other interested entities, the Office of Air and Radiation (OAR) has determined that additional evaluation of several matters is required before it can take final action on the November 16 NPRM. Consequently, OAR now recognizes that finalizing the November 16 NPRM will require more time than it had previously anticipated. In the meantime, Small Manufacturers who, in reliance on the November 16 NPRM, have reached their calendar year 2018 annual allocation under the HD Phase 2 Rule must cease production for the remainder of calendar year 2018 of additional glider vehicles, resulting in the loss of jobs and threatening the viability of these Small Manufacturers.

As noted in your memorandum, OAR now intends to move as expeditiously as possible to undertake rulemaking in which it will consider extending the compliance date applicable to Small Manufacturers to December 31, 2019.

Consistent with the intent and purpose of OAR's planned course of action, this no action assurance provides that EPA will exercise its enforcement discretion with respect to the applicability of 40 C.F.R. § 1037.635 to Small Manufacturers that in 2018 and 2019 produce for each of those two years up to the level of their Interim Allowances as was available to them in calendar year 2017 under 40 C.F.R. § 1037.150(t)(3). This no action assurance further provides that EPA will exercise its enforcement discretion with respect to Suppliers that sell glider kits to those Small Manufacturers to which this no action assurance applies. This no action assurance will remain in effect until the earlier of: (1) 11:59 p.m. (EDT), July 6, 2019; or (2) the effective date of a final rule extending the compliance date applicable to small manufacturers of glider vehicles.

The issuance of this no action assurance is in the public interest to avoid profound disruptions to small businesses while EPA completes its reconsideration of the HD Phase 2 Rule. The EPA reserves its right to revoke or modify this no action assurance.

If you have further questions regarding this matter, please contact Rosemarie Kelley of my staff at (202) 564-4014, or kelley.rosemarie@epa.gov.

Attachment

cc: Byron Bunker, OAR, OTAQ
Rosemarie Kelley, OECA, OCE
Phillip Brooks, OECA, OCE, AED

MEMORANDUM

SUBJECT: Enforcement Discretion Regarding Companies that Are Producing or that Have Produced Glider Vehicles in Calendar Year 2018

FROM: Bill Wehrum
Assistant Administrator
Office of Air and Radiation



7-6-18

TO: Susan Parker Bodine
Assistant Administrator
Office of Enforcement and Compliance Assurance

The Office of Air and Radiation (OAR) requests that the Office of Enforcement and Compliance Assurance (OECA) exercise enforcement discretion (No Action Assurance) with respect to both those small manufacturers to which 40 C.F.R. § 1037.150(t) applies that either are manufacturing or that have manufactured glider vehicles in calendar year 2018 (Small Manufacturers), and to those companies to which 40 C.F.R. § 1037.150(t)(1)(vii) applies that sell glider kits to such small manufacturers (Suppliers). Specifically, as a bridge to a rulemaking in which we will consider extending the deadline for Small Manufacturers to comply with 40 C.F.R. § 1037.635, OAR requests that OECA provide assurance that it will exercise enforcement discretion for up to one year with respect to the applicability to Small Manufacturers and their Suppliers of 40 C.F.R. § 1037.635. Further, OAR requests that OECA provide assurance that it will not take enforcement action against those Suppliers that elect to sell glider kits to those Small Manufacturers of glider vehicles to which this No Action Assurance applies.

In conjunction with EPA's having promulgated in 2016 the final rule entitled Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles—Phase 2, 81 Fed. Reg. 73,478 (Oct. 25, 2016) (the HD Phase 2 Rule), the Agency clarified that glider vehicles were “new motor vehicles” (and glider vehicle engines to be “new motor vehicle engines”) within the meaning of 42 U.S.C. § 7550(3). EPA in the HD Phase 2 Rule also stated that glider kits constituted “incomplete motor vehicles.” Effective January 1, 2017, Small Manufacturers were permitted to manufacture glider vehicles in 2017 in the amount of the greatest number produced in any one year during the period 2010-2014 without meeting the requirements of 40 C.F.R. § 1037.635 (Interim Allowance). After this transitional period, beginning on January 1, 2018, small manufacturers of glider vehicles have been precluded from manufacturing more than 300 glider vehicles (or fewer, if a particular manufacturer's highest annual production volume from between 2010 and 2014 had been below 300 vehicles), unless they use engines that comply with the emission standards applicable to the model year in which the glider vehicle is manufactured.

On November 16, 2017, EPA published in the *Federal Register* a notice of proposed rulemaking, proposing to repeal the emissions standards and other requirements of the HD Phase 2 Rule as they apply to glider vehicles, glider engines, and glider kits. 82 Fed. Reg. 53,442 (Nov. 16, 2017) (November 16 NPRM). In the November 16 NPRM, EPA proposed an interpretation of the Clean Air Act (CAA) under which glider vehicles would be found not to constitute “new motor

vehicles” within the meaning of CAA section 216(3), glider engines would be found not to constitute “new motor vehicle engines” within the meaning of CAA section 216(3), and glider kits would not be treated as “incomplete” new motor vehicles. Under this proposed interpretation, EPA would lack authority to regulate glider vehicles, glider engines, and glider kits under CAA section 202(a)(1). EPA also sought comment on whether, were it not to promulgate this proposed interpretation of the CAA, the Agency should increase the interim provision’s allocation available to small manufacturers above the current applicable limits (*i.e.*, at most, 300 glider vehicles per year). 82 Fed. Reg. 53,447. Further, EPA solicited comment on whether the compliance date for glider vehicles and glider kits set forth at 40 C.F.R. § 1037.635 should be extended. *Id.*

After taking into consideration the public comments received, and following further engagement with stakeholders and other interested entities, OAR has determined that additional evaluation of a number of matters is required before it can take final action on the November 16 NPRM. As a consequence, OAR now recognizes that finalizing the November 16 NPRM will require more time than we had previously anticipated.

OAR intends to complete this rulemaking as expeditiously as possible under these circumstances, consistent with the Agency’s responsibility to ensure that whatever final action it may take conforms with the Clean Air Act and is based on reasoned decision making. In the meantime, while the emissions standards and other requirements of the 2016 Rule applicable to glider vehicles became effective on January 1, 2017, and the Interim Allowance for calendar year 2017 ceased to apply as of January 1, 2018. As a consequence, Small Manufacturers who, in reliance on the November 16 NPRM, have reached their calendar year 2018 interim annual allocation under the HD Phase 2 Rule must cease production for the remainder of 2018, resulting in the loss of jobs and threatening the viability of these Small Manufacturers.

In light of these circumstances, OAR now intends to move as expeditiously as possible to undertake rulemaking to consider extending the compliance date applicable to Small Manufacturers until December 31, 2019. Concurrently, we intend to continue to work towards expeditiously completing a final rule. OAR requests a No Action Assurance in order to preserve the status quo as it was at the time of the November 16 NPRM until such time as we are able to take final action on extending the applicable compliance date. Specifically, OAR requests that OECA exercise its enforcement discretion with respect to Small Manufacturers who in 2018 and 2019 produce for each of those two years up to the level of their Interim Allowance as was available to them in 2017 under 40 C.F.R. § 1037.150(t)(3). OAR requests that OECA leave this No Action Assurance in place for one year from the date of issuance, or until such time as EPA takes final action to extend the compliance date, whichever comes sooner.

I appreciate your prompt consideration of this request.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JAN 20 2012

ASSISTANT ADMINISTRATOR
FOR ENFORCEMENT AND
COMPLIANCE ASSURANCE

HCFC Importers and Producers (see enclosed list)

Re: No Action Assurance Regarding the Production and Import of HCFCs in 2012

Dear Sir/Madam:

Today, the EPA is providing a no action assurance (No Action Assurance) to the attached list of producers and/or importers of HCFC-22 and/or HCFC-142b – two types of hydrochlorofluorocarbons (HCFCs) regulated under 40 C.F.R. §§ 82.17 and 82.19. This No Action Assurance is being issued in response to a request set forth in the memorandum to me dated December 21, 2011, from Assistant Administrator for Air and Radiation Gina McCarthy. As explained more fully below, this No Action Assurance establishes that the EPA will exercise its enforcement discretion to not pursue enforcement for violations of the prohibition at 40 C.F.R. § 82.15 on consumption, production and import without allowances if producers and importers do not exceed the amount listed in the proposed regulatory text of section 82.16(a)(1), 77 Fed. Reg. 237, 251 (January 4, 2012). The percentages listed in the proposed regulatory text in section 82.16(a)(1) would provide the following allowance amounts in 2012:

- A company with an HCFC-142b baseline would be allowed to produce or consume up to 4.9% of its baseline allowances listed at 40 CFR 82.17 and 82.19;
- A company with an HCFC-22 baseline would be allowed to produce or consume up to 17.7% of its baseline allowances listed at 40 CFR 82.17 and 82.19.

EPA's regulations at 40 C.F.R. Part 82 prohibit the production or importation of HCFCs without possessing an allowance allocated by EPA for each kilogram of HCFC. The allowances allocated for the time period between 2004 and 2009 were established by EPA in a 2003 rule (68 Fed. Reg. 2819), and the allowances allocated for the 2010-2014 period were set forth in a subsequent rule promulgated in December 2009 (the 2009 Rule). Each year, EPA also issues a letter to the producers and importers notifying them of their respective annual allocation of allowances based on these regulations.

Aspects of the 2009 Rule that relate to the allocations of HCFC-22 and HCFC-142b allowances for the 2010-2014 time period were challenged in the D.C. Circuit. On August 27, 2010, the Court issued a decision vacating the 2009 Rule in part. The other aspects of the 2009 Rule, including allocations of HCFC-123, HCFC-124, HCFC-225ca and HCFC-225cb allowances, were not challenged, and are not affected by this NAA.

On January 4, 2012, the EPA published a proposed rule to address the Court's vacatur of the 2009 Rule (77 Fed. Reg. 237) and to establish calendar year allowances for production and consumption. This rule is not final and the EPA will be taking comment before issuing a final rule.

This No Action Assurance establishes that the EPA will exercise its discretion not to pursue enforcement for violations of 40 C.F.R § 82.15 provided that production or importation of these HCFCs is conducted in accordance with the methodology described above.

The No Action Assurance is to remain in effect until either (1) 11:59 P.M. EST, December 31, 2012, or (2) the effective date of the final rule governing HCFC calendar year allowances for 2012, whichever occurs earlier.


This exercise of discretion is subject to the following conditions:

- Companies must continue to comply with recordkeeping and reporting requirements at 40 C.F.R. § 82.24, including quarterly production and import reports.
- Any HCFCs produced or imported in 2012 pursuant to this No Action Assurance shall count towards the company's 2012 allocation and shall require the expenditure of allowances for 2012.
- This exercise of discretion terminates 11:59 P.M., EST, December 31, 2012 or on the effective date of the EPA rule governing HCFC allowances for calendar year 2012, whichever occurs earlier.
- The EPA reserves the right to revoke or modify this No Action Assurance.

The issuance of a No Action Assurance for this period of time is in the public interest as it will prevent disruptions in the supply of HCFCs for refrigeration purposes. I believe this action will not increase environmental harm, as no additional allowances are or will be allocated based on this action.

If you have any further questions regarding this matter, please contact Charlie Garlow of my staff at (202) 564-1088 or garlow.charlie@epa.gov.

Sincerely,



Cynthia Giles

Enclosures

Cc: Gina McCarthy
Sarah Dunham
Drusilla Hufford
David Donaldson



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

FEB 07 2012

ASSISTANT ADMINISTRATOR
FOR ENFORCEMENT AND
COMPLIANCE ASSURANCE

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American Home Furnisher's Association
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High Point, NC 27261

David Buff
Florida Sugar Industry
6026 NW 1st Place
Gainesville, FL 32607

Re: No Action Assurance Regarding Certain Deadlines in the March 2011 Major Source
Boiler MACT Rule and the March 2011 CISWI Rule

Dear Sir/Madam:

Today, the EPA is providing a no action assurance (No Action Assurance) to all owners and/or operators of industrial boilers and commercial or industrial solid waste incineration units with respect to the notification deadlines contained in two regulations (discussed below), and subject to certain specified terms and conditions. This No Action Assurance is being issued in response to a request from Assistant Administrator for Air and Radiation Gina McCarthy. As explained more fully below, this No Action Assurance establishes that the EPA will exercise its enforcement discretion to not pursue enforcement action for violations of certain notification deadlines established in two recent final rules issued under sections 112 and 129 of the Clean Air Act. Specifically, this No Action Assurance addresses provisions of (1) the final rule to regulate industrial, commercial, and institutional boilers and process heaters located at major sources of hazardous air pollutant emissions (the "Major Source Boiler MACT"), 76 Fed. Reg. 15,608 (March 21, 2011), and (2) the final rule to regulate emissions of certain air pollutants from commercial and industrial solid waste incineration units (the "CISWI Rule"), 76 Fed.

Reg. 15,704 (March 21, 2011). For each rule specified above, this is limited to any violations of each specified notification deadline that may have occurred from the original effective date of the Major Source Boiler MACT and/or CISWI Rule until this No Action Assurance is no longer in effect for the relevant deadline.

Under the Major Source Boiler MACT, sources of hazardous air pollutants that are subject to the Rule pursuant to 40 C.F.R. § 63.7490 are designated as “affected sources.” The Major Source Boiler MACT requires that an existing affected source that started up before May 20, 2011 submit an Initial Notification to the relevant authority not later than 120 days after May 20, 2011, making such notice due September 17, 2011. 40 C.F.R. § 63.7545(b). The Major Source Boiler MACT also requires that a new or reconstructed affected source that started up on or after May 20, 2011 submit an Initial Notification not later than 15 days after the actual date of startup. 40 C.F.R. § 63.7545(c).

New sources that become subject to Subpart CCCC of 40 C.F.R. Part 60 under the CISWI Rule must also comply with notification requirements. For such sources, the CISWI Rule requires that a notification be sent to the relevant authority prior to commencing construction. This notice must include each of the following: a statement of intent to construct; the anticipated date of commencement of construction; all documentation produced as a result of the siting requirements of §60.2050; the waste management plan as specified in §§60.2055 through 60.2065; and the anticipated date of initial startup. 40 C.F.R. § 60.2190. CISWI requires that a notification of the date that construction of the source will commence be postmarked no later than 30 days after such date, in accordance with 40 C.F.R. § 60.7(a)(1). 40 C.F.R. § 60.2230. A notification of the actual date of initial startup of an affected facility must also be sent, postmarked within 15 days after initial startup, in accordance with 40 C.F.R. § 60.7(a)(3). 40 C.F.R. § 60.2230.

When these rules were issued, the Major Source Boiler MACT was to become effective on May 20, 2011, and the CISWI Rule was to become effective on September 21, 2011. On May 18, 2011, however, the EPA published a notice in the Federal Register delaying the effective dates of the Major Source Boiler MACT and the CISWI Rule. In the notice of delay, as it had previously, the EPA stated that it was in the process of developing a proposed reconsideration of certain aspects of both rules. Industrial, Commercial, and Institutional Boilers and Process Heaters and Commercial and Industrial Solid Waste Incineration Units; Final Rules; Delay of Effective Dates, 76 Fed. Reg. 28,663 (“Delay Notice”) (citing National Emission Standards for Hazardous Air Pollutants; Notice of Reconsideration, 76 Fed. Reg. 15,266, 15,267 (March 21, 2011)). The EPA proposed reconsideration of both rules in December 2011, and currently intends to finalize the reconsiderations in the spring of 2012.

On January 9, 2012, the federal district court for the District of Columbia issued a decision vacating and remanding the May 18, 2011, Delay Notice. *Sierra Club v. Jackson*, No. 11-1278 (D.D.C. Jan. 9, 2012).

The vacatur of the Delay Notice has caused confusion and concern in the regulated community, particularly among sources who, but for the Delay Notice, would have submitted the above-discussed notifications prior to January 9, 2012. The vacatur, in conjunction with the proposed reconsideration of the major Source Boiler MACT, has created additional uncertainty regarding notice requirements because the EPA has proposed revisions to the compliance dates for all units (the date by which a unit must be in compliance with the substantive requirements in the Boiler MACT Rule) and to the subcategories for some units. Under the Major Source Boiler MACT, a source must identify its compliance date and applicable subcategory in its Initial Notification. If the EPA issues final action on reconsideration with amended compliance dates and subcategory revisions similar to those in the

proposed reconsideration, all of the approximately 1,800 notifications from affected facilities would be incorrect, and thus would have to be revised and resubmitted. Since the EPA intends to issue a final action on reconsideration of the Major Source Boiler MACT in the spring of this year, it makes sense for sources to avoid duplicative work and wait to submit their Initial Notifications until after the final rule is issued.

For the reasons discussed above, this No Action Assurance establishes that the EPA will exercise its discretion not to pursue enforcement for violations of the notification deadlines identified below that were established in the Major Source Boiler MACT Rule and the CISWI Rule, provided that the conditions set forth below are satisfied. Specifically, the EPA will exercise its discretion not to pursue enforcement for the following violations:

Major Source Boiler MACT:

- Failure to submit a complete Initial Notification by the dates required under the Major Source Boiler MACT (*see* 40 C.F.R. § 63.7545(b) & (c)).

New Sources Under the CISWI Rule:

- Failure to timely submit a complete notification prior to construction containing all elements identified in 40 C.F.R. § 60.2190;
- Failure to timely submit a notification of construction as required by 40 C.F.R. § 60.2230 that complies with 40 C.F.R. § 60.7(a)(1); and
- Failure to timely submit a notification of start-up as required by 40 C.F.R. § 60.2230 that complies with 40 C.F.R. § 60.7(a)(3).

I emphasize that this No Action Assurance applies only to the timeliness of these requirements, not to the underlying requirements themselves. I also note that nothing in this No Action Assurance affects any other provisions in the Major Source Boiler MACT or CISWI Rule besides those explicitly listed above.

This exercise of discretion is subject to the following conditions:

- The No Action Assurance is to remain in effect for the above-listed Major Source Boiler MACT provisions until either (1) 11:59 PM EDT, December 31, 2012, or (2) the effective date of a final rule addressing the proposed reconsideration of the Major Source Boiler MACT, whichever occurs earlier. The No Action Assurance is to remain in effect for the above-listed CISWI provisions until either (1) 11:59 P.M. EDT, April 30, 2013, or (2) the effective date of a final rule addressing the proposed reconsideration of the CISWI Rule, whichever occurs earlier. The EPA has proposed new notification deadlines in its proposed reconsideration of each rule, and, if the Agency takes final action to adopt those proposed deadlines, they will control.
- The EPA reserves the right to revoke or modify this No Action Assurance.

The issuance of a No Action Assurance for this period of time is in the public interest to alleviate public confusion and to ensure orderly administration of the affected rules. The EPA had delayed the effectiveness of the rules containing the deadlines, leading owners of affected facilities to not make certain notifications by the deadlines imposed by the rules. In addition, the proposed changes to the Major Source Boiler MACT notification deadlines and subcategories of sources, if finally adopted, would render notifications sent pursuant to the current Rule ineffective and require new notification. I believe this action will not increase environmental harm, as no requirements to comply with emissions

standards are affected by this action and the EPA expects new provisions in a final rule to soon supercede the notification deadlines addressed above.

If you have any further questions regarding this matter, please contact Sara Froikin of my staff at (202) 564-3187 or froikin.sara@epa.gov.

Sincerely,



Cynthia Giles

cc: Gina McCarthy
Steve Page
Peter Tsirigotis
Robert Wayland
David Cozzie



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAR 13 2012

OFFICE OF
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Small Business Ombudsman / Small Business
Environmental Assistance Programs
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Re: No Action Assurance Regarding Certain Work Practice or Management Practice Standard Deadlines in the March 2011 Area Source Boiler Rule

Dear Sir/Madam:

Today, the EPA is providing a no action assurance (No Action Assurance) to all owners and/or operators of existing industrial boilers and commercial and institutional boilers at area sources that are subject to the requirement to conduct a tune-up by March 21, 2012 in the final rule discussed below. This No Action Assurance is being issued in response to a request from Assistant Administrator for Air and Radiation Gina McCarthy. As explained more fully below, this No Action Assurance addresses provisions of the final rule to regulate industrial boilers and commercial and institutional boilers at area sources of hazardous air pollutant emissions (the "Area Source Boiler Rule"), 76 Fed. Reg. 15,554 (March 21, 2011). Specifically, this No Action Assurance establishes that the EPA will exercise its enforcement discretion to not pursue enforcement action for failure to complete a tune-up required by a work practice or management practice standard by the compliance date of March 21, 2012 established in 40 C.F.R. § 63.11196(a)(1), subject to certain specified terms and conditions.

Under the Area Source Boiler Rule, area sources that fall into two subcategories of boilers – existing or new coal units with heat input capacity of less than 10 million Btu per hour, and existing or new biomass or oil units – are required to comply with work practice or management practice standards that consist of undergoing biennial tune-ups. 40 C.F.R. § 63.11201(b) (requiring compliance with the work practice or management practice standards specified in Table 2 to Subpart JJJJJ of Part 63 of the C.F.R.); 40 C.F.R. Part 63, Subpart JJJJJ, Table 2 (listing requirements by boiler subcategory). For existing affected boilers, the Area Source Boiler Rule established that the first of these tune-ups must be completed by March 21, 2012. 40 C.F.R. § 63.11196(a)(1).

Over 180,000 existing area source boilers are required to do tune-ups under the Area Source Boiler Rule. However, many facilities with older affected boilers have indicated that it is not possible to meet the March 21, 2012 compliance date. Entities particularly affected include those with large numbers of facilities with affected boilers, such as in the telecommunication sector; those with a large number of affected boilers, such as military installations; and those with seasonal boilers, such as the sugar cane industry and facilities in Alaska. These industries' representatives have identified specific problems with testing required to comply with the tune-up requirement in the final rule. Specifically, the final rule requires stack testing to measure carbon monoxide and oxygen as a component of the tune-up. 40 CFR 63.11223(b)(5). The rule further requires that combustion be optimized consistent with manufacturers'

specifications. 40 CFR 63.11223(b)(3). However, many facilities with area source boilers have indicated that they are not equipped to measure carbon monoxide and oxygen, and must undergo alterations such as the installation of a sampling port or platform before stack testing would be possible. Other facilities with older affected boilers have noted that many boilers will need to be repaired before they will be able to meet manufacturer specifications, such as the proper air-to-fuel ratio, and be ready to undergo the testing needed to comply with the tune-up requirements. Given the limited number of individuals qualified to conduct and complete these repairs, industry representatives assert that they are unable to schedule and complete the repairs, in addition to scheduling and completing the tune-ups, during the one-year initial compliance period specified in the final rule. At this time, the EPA continues to evaluate these assertions and observations. While we have not concluded that each of these points is valid, the Agency has sufficient concern at this time about these issues to question whether compliance by March 21, 2012 is feasible for a significant number of parties.

In addition, the EPA recently published a proposed reconsideration of the Area Source Boiler Rule that would adjust the relevant initial compliance date for compliance with work practice or management practice standards from March 21, 2012, to March 21, 2013, which would provide affected sources subject to the tune-up requirement with an additional year to demonstrate initial compliance with that requirement. National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers; Proposed Rule; Reconsideration of Final Rule, 76 Fed. Reg. 80,532 (Dec. 23, 2011). The regulated community is aware of the EPA's proposed extension to the compliance date, and this has caused confusion and uncertainty in the regulated community. The EPA stated that this change was proposed in part because the EPA recognized that some sources – particularly those with large numbers of affected boilers or seasonal boilers – cannot timely complete the testing needed to comply with the tune-up requirements. 76 Fed. Reg. at 80,535.

Finally, the only way for sources to avoid being in noncompliance if they cannot meet the tune-up compliance date would be for sources to stop operating their boilers until the tune-up can be completed. However, the affected categories of sources include many for which shutdown would be problematic and possibly dangerous, such as hospitals, clinics, nursing homes, and schools. It would not be in the public interest for such sources to shut down.

For the reasons discussed above, this No Action Assurance establishes that the EPA will exercise its discretion not to pursue enforcement for violations of the deadline to complete an initial tune-up identified in 40 C.F.R. § 63.11196(a)(1). This No Action Assurance applies only to the timeliness of the tune-up, and I note that nothing in this No Action Assurance affects any other provisions in the Area Source Boiler Rule.


This exercise of discretion is subject to the following conditions:

- The No Action Assurance is to remain in effect until either (1) 11:59 PM EDT, October 1, 2012, or (2) the effective date of a final rule addressing the proposed reconsideration of the Area Source Boiler Rule, whichever occurs earlier. The EPA has proposed new deadlines for initial tune-ups in its proposed reconsideration of the Area Source Boiler Rule, and, if the Agency takes final action to adopt those proposed deadlines, they will control.
- The EPA reserves the right to revoke or modify this No Action Assurance.

The issuance of a No Action Assurance for this period of time is in the public interest to ensure all existing sources have sufficient time to complete their initial tune-ups. I believe this action is consistent with the protections afforded under the proposed reconsideration of the Area Source Boiler Rule.

If you have any further questions regarding this matter, please contact Sara Froikin of my staff at (202) 564-3187 or froikin.sara@epa.gov.

Sincerely,



Cynthia Giles
Assistant Administrator

Cc: Gina McCarthy
Steve Page
Peter Tsirigotis
Robert Wayland



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUL 18 2012

ASSISTANT ADMINISTRATOR
FOR ENFORCEMENT AND
COMPLIANCE ASSURANCE

MEMORANDUM

SUBJECT: Extension of the March 13, 2012, No Action Assurance Regarding the Area Source Boiler Rule to Apply to the Deadline for Submitting the Notification of Compliance Status Regarding Initial Tune-Ups for Certain Area Source Boilers, and Amendment to the No Action Assurance Expiration Date

TO: Gina McCarthy
Assistant Administrator, Office of Air and Radiation

FROM: Cynthia Giles 
Assistant Administrator, Office of Enforcement and Compliance Assurance

Under the Area Source Boiler Rule, 76 Fed. Reg. 15,554 (March 21, 2011), owners and/or operators of certain types of boilers are required to complete biennial tune-ups of those boilers.¹ For existing boilers of these types, the Area Source Boiler Rule requires that the initial tune-up be completed by March 21, 2012. 40 C.F.R. § 63.11196(a)(1).

The Area Source Boiler Rule also requires that sources subject to the initial tune-up requirement, and not required to conduct a performance stack test, must submit a Notification of Compliance Status regarding the initial tune-up by 120 days after the compliance date of March 21, 2012. 40 C.F.R. 63.11225(a)(4). This means that sources must submit such a Notification by July 19, 2012. The Notification must include, among other information, a certification that states: "This facility complies with the requirements in § 63.11214 to conduct an initial tune-up of the boiler."

On March 13, 2012, the EPA issued a no action assurance to all owners and/or operators of existing industrial boilers and commercial and institutional boilers at area sources of hazardous air pollutant emissions stating that EPA would not enforce the requirement to conduct an initial tune-up by March 21, 2012. Letter from Cynthia Giles, Assistant Administrator, to Kate Williams et al. (March 13, 2012) ("No Action Assurance") (see copy attached to this letter). As discussed more fully in that document, the No Action Assurance was primarily based upon EPA's concern that sources were reporting a shortage of qualified individuals to prepare boilers for tune-ups and then conduct those tune-ups by the regulatory

¹ 40 C.F.R. § 63.11201(b) (requiring compliance with the work practice or management practice standards specified in Table 2 to Subpart JJJJJJ of Part 63 of the C.F.R.); 40 C.F.R. Part 63, Subpart JJJJJJ, Table 2 (listing requirements by boiler subcategory).



deadline, as well as upon the uncertainty in the regulated community resulting from the pending reconsideration of the Area Source Boiler Rule. The No Action Assurance states that it remains in effect until either (1) 11:59 PM EDT, October 1, 2012, or (2) the effective date of a final rule addressing the proposed reconsideration of the Area Source Boiler Rule, whichever occurs earlier.

To date, a final rule addressing the proposed reconsideration of the Area Source Boiler Rule has not been issued, and thus the No Action Assurance continues to remain in effect. Nothing that EPA has learned since the issuance of the original No Action Assurance letter has led EPA to question its original concerns about the feasibility of all sources timely completing an initial tune-up. Sources that did not complete a tune-up cannot now certify that they conducted one. Thus, we are now extending the No Action Assurance for sources required to complete an initial tune-up by March 21, 2012, to also include the deadline for submitting the Notification of Compliance Status regarding the initial tune-up. This extension of the March 13, 2012, No Action Assurance is being issued in response to your request.

This extension of the No Action Assurance applies only to the requirement to submit a Notification of Compliance Status regarding the initial tune-up by July 19, 2012, and does not affect or apply to any other provisions in the Area Source Boiler Rule.

This exercise of discretion is subject to the following conditions:

- This extension of the March 13, 2012, No Action Assurance is to remain in effect until either (1) 11:59 PM EST, December 31, 2012, or (2) the effective date of a final rule addressing the proposed reconsideration of the Area Source Boiler Rule, whichever occurs earlier. The EPA has proposed new deadlines for initial tune-ups, and thus for the Notification of Compliance Status, in its proposed reconsideration of the Area Source Boiler Rule, and, if the Agency takes final action to adopt those proposed deadlines, they will control.
- The EPA reserves the right to revoke or modify this extension of the March 13, 2012 No Action Assurance.

In addition, given that no final rule addressing the proposed reconsideration of the Area Source Boiler Rule has been issued to date, but EPA still expects to issue such a final rule, the pending reconsideration continues to create uncertainty in the regulated community. Thus, this letter also amends the expiration date of the March 13, 2012, No Action Assurance, such that the No Action Assurance will remain in effect until either (1) 11:59 PM EST, December 31, 2012, or (2) the effective date of a final rule addressing the proposed reconsideration of the Area Source Boiler Rule, whichever occurs earlier. The conditions of the earlier March 13, 2012, No Action Assurance are otherwise unaffected.

As discussed in the March 13, 2012, No Action Assurance, the issuance of this amendment and extension of the No Action Assurance is in the public interest and is consistent with the protections afforded under the proposed reconsideration of the Area Source Boiler Rule.

If you have any further questions regarding this matter, please contact Sara Froikin of my staff at (202) 564-3187 or froikin.sara@epa.gov.

Attachments: March 13, 2012, No Action Assurance

Cc:

Steve Page, US EPA
Peter Tsirigotis, US EPA
Robert Wayland, US EPA
Kate Williams, Alaska Oil and Gas Association
Randy Rawson, American Boiler Manufacturer's Association
Leslie Hulse, American Chemistry Council
David Darling, American Coatings Association
Tim Hunt, American Forest & Paper Association
Bill Perdue, American Home Furnisher's Association
Pete Pagano, American Iron and Steel Institute
Matt Todd and John Wagner, American Petroleum Institute
Debra Jezouit, Class of '85 Regulatory Response Group
Robert Bessette, Council of Industrial Boiler Owners
Felix Mestey, Department of Defense
Grif Bond, Environmental Health & Safety Communications Panel
David Buff, Florida Sugar Industry
Dan Bosch, National Federation of Independent Business
Jennifer Youngblood, National Tribal Air Association
Renee Lesjak Bashel, National Steering Committee, Small Business Ombudsman / Small Business
Environmental Assistance Programs
Daniel Moss, Society of Chemical Manufacturers & Affiliates



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

NOV 21 2012

Jed Mandel, President
Truck and Engine Manufacturers Association
333 West Wacker Drive
Suite 810
Chicago, IL 60606

ASSISTANT ADMINISTRATOR
FOR ENFORCEMENT AND
COMPLIANCE ASSURANCE

Dear Sir:

This letter is in response to concerns raised by the manufacturers of nonroad spark-ignition engines rated at 25 horsepower or greater (LSI engines) regarding the lack of availability of fuel lines meeting the Category 1 permeation limits in the 2004 version of Society of Automotive Engineers (SAE) Publication J2260 (SAE J2260: 2004) for use in equipment powered by LSI engines. For the reasons set forth below, the United States Environmental Protection Agency (EPA) will exercise its discretion not to pursue enforcement under 40 C.F.R. § 1068.101(a) where a manufacturer uses fuel lines meeting the 1996 version of SAE Publication J2260 (SAE J2260: 1996) and meets the conditions specified below. This No Action Assurance is effective immediately and will continue until the date the rule change described below becomes effective, or until November 30, 2013, whichever is earlier.

The EPA adopted evaporative emission requirements for LSI engines on November 8, 2002. 67 Fed. Reg. 68242. These requirements, codified in 40 C.F.R. Part 1048, required LSI engine manufacturers to meet certain evaporative emission requirements by using or specifying the use (to equipment manufacturers installing LSI engines) of fuel lines meeting the Category 1 limits for permeation in SAE J2260: 1996. The regulations were updated on December 8, 2008, to require fuel lines meeting the Category 1 limits for permeation contained in SAE J2260: 2004 instead of SAE J2260: 1996. When writing the original regulations in 2002, EPA believed that adopting the Category 1 standard in SAE J2260: 1996 would allow the use of fuel lines already in common use in the automotive industry (designed to meet stricter automotive evaporative emission requirements), and that LSI engine manufacturers could find “off-the-shelf” automotive-grade products for the LSI engines and equipment containing LSI engines. The adoption of the Category 1 standard in SAE J2260: 1996 had the added advantage of aligning EPA requirements with those of the State of California. In 2008, EPA revised this requirement by changing the regulation to reference SAE J2260: 2004, as part of a broader effort to update all provisions that were incorporated by reference into the regulations. As noted in the proposed rule, while EPA knew that SAE J2260: 2004 uses different test procedures, EPA believed that the stringency of the evaporative emission requirements would not change. EPA’s overall expectation was that fuel lines meeting SAE J2260: 1996 would also meet SAE J2260: 2004. Further, EPA never



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intended to require LSI manufacturers to meet a different standard for equipment sold in states outside of California than they are required to meet in California.

Since that time, several LSI engine manufacturers and equipment manufacturers have demonstrated to EPA's satisfaction that fuel lines meeting the SAE J2260: 2004 are not readily available to LSI engine manufacturers or equipment manufacturers. This lack of availability is related to a lack of testing data rather than data indicating that fuel lines meeting the SAE J2260: 1996 will not meet the permeation limits contained in SAE J2260: 2004. Certain companies have indicated that equipment manufacturers may soon be idling assembly lines due to lack of supply of fuel lines that have been verified to comply with SAE J2260: 2004.

The EPA intends to address the lack of availability of LSI fuel lines meeting the required specification in a future rulemaking. Once adopted, a new provision will allow the use of LSI fuel lines meeting the requirements of either SAE J2260: 1996 or SAE J2260: 2004. The EPA believes this allowance will provide the intended level of emissions control while, at the same time, allowing manufacturers to produce compliant equipment meeting a common EPA and California LSI fuel line standard.

Pending the completion of this rule change and effective immediately, the EPA will exercise its enforcement discretion (through this No Action Assurance) not to pursue enforcement action for failure to meet the evaporative emission requirements related to fuel lines installed on LSI engines where LSI engine or equipment manufacturers meet the following conditions:

1. Install fuel lines meeting SAE J2260: 1996; and
2. Comply with all State, local, or Federal laws pertaining to these engines and equipment.

This No Action Assurance is to remain in effect until the earlier of (1) 11:59 PM EST, November 30, 2013, or (2) the effective date of a final rule allowing the use of fuel line meeting SAE J2260: 1996 on equipment containing LSI engines. The issuance of this No Action Assurance is in the public interest. I believe that this action will not result in increased emissions. The EPA reserves the right to revoke or modify this No Action Assurance at any time.

If you have any questions regarding this matter, you may call Anne Wick, Vehicle and Engines Team Leader, at (202) 564-2063.

Sincerely,



For
Cynthia Giles



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

DEC 19 2012

OFFICE OF
ENFORCEMENT AND
COMPLIANCE ASSURANCE

Ms. Tracy Heinzman
Wiley, Rein & Fielding, L.L.P.
1776 K Street, N.W.
Washington, D.C. 20006

Re: No Action Assurance Regarding the Production of Methyl Bromide for 2013 Critical Uses

Dear Ms. Heinzman:

I am writing in response to your November 16, 2012, letter to the United States Environmental Protection Agency on behalf of the Methyl Bromide Industry Panel representing producers and importers, in which you request that the EPA not enforce restrictions on methyl bromide production and import found at 40 CFR § 82.4 until such time as the EPA's Office of Air and Radiation issues a final rule that authorizes the production and import of methyl bromide for critical uses in 2013. In your letter, you explain that methyl bromide production and import is essential to ensure pest control in some vital agricultural sectors, including controlling infestations in domestic plantings and food supply operations.

EPA recently signed for publication a notice of proposed rulemaking authorizing critical use of methyl bromide for 2013. EPA intends to finalize the rule as quickly as feasible, after considering public comment. I understand that without the production or importation of critical use methyl bromide in early 2013, critical users will have difficulty meeting their needs for early spring applications. The EPA recognizes, however, that the current regulations only authorize the production, importation or use of critical use methyl bromide through December 31, 2012. Thus, there is no current regulatory authorization to produce, import or use methyl bromide for critical uses in 2013.

For the reasons outlined in your letter, the EPA will exercise its enforcement discretion not to pursue enforcement for violations of 40 CFR § 82.4 against companies identified in the proposed 2013 critical use exemption rule as holders of critical use allowances for 2013, to produce, import or sell critical use methyl bromide for the proposed critical uses for 2013, in amounts not to exceed 340,831 kg. EPA will also exercise its enforcement discretion not to pursue enforcement for violations of 40 CFR § 82.4 against persons identified in the proposed rule as approved critical users who purchase or use critical use methyl bromide produced or imported by such companies for locations and uses identified as approved critical uses in the proposed 2013 critical use exemption rule. This exercise of discretion will begin on January 1, 2013, and is subject to the following conditions:

- Companies must continue to report 2012 and 2013 production and importation of methyl bromide to the EPA as required under the critical use regulations at 40 CFR § 82.13;
- Any critical use methyl bromide produced or imported in 2013 prior to the effective date of the final rule shall still count towards the company's 2013 allocation and, once the rule is effective,

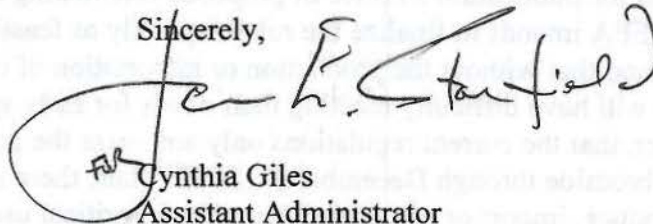
require the expenditure of 2013 vintage critical use allowances for all methyl bromide used during calendar year 2013;

- The allowance allocations are based on each company's proportionate share of allowances in the proposed rule, as follows:
 - Chemtura: Preplant 196,114 kg; Post Harvest: 11,008 kg
 - Albemarle: Preplant 80,647 kg; Post Harvest: 4,527 kg
 - ICL-IP: Preplant 44,567 kg; Post Harvest: 2,502 kg
 - TriCal: Preplant 1,388 kg; Post Harvest: 78 kg
- Companies and critical users identified in the proposed rule must comply with all requirements of 40 CFR § 82.4 and the proposed rule;
- This exercise of discretion terminates upon the effective date of the final rule for 2013 or 11:59 E.D.T., July 31, 2013, whichever occurs earlier; and
- The EPA reserves the right to revoke or modify this no action assurance.

The issuance of a no action assurance for this short period of time is in the public interest as it will prevent disruptions in critical pest control activities. I believe that this action will not increase environmental harm, as no additional allowances are or will be allocated based on this action.

If you have any further questions regarding this matter, please contact Charles Garlow, (202) 564-1088.

Sincerely,



Handwritten signature of Cynthia Giles in black ink, written over a circular stamp.

CG
Cynthia Giles
Assistant Administrator

cc: Gina McCarthy
Assistant Administrator, Office of Air and Radiation



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

JAN 07 2013

OFFICE OF
ENFORCEMENT AND
COMPLIANCE ASSURANCE

HCFC Importers and Producers (see attached list)

Re: Extension of No Action Assurance Regarding the Production and Import of HCFCs

Dear Sir/Madam:

Today, the EPA is revising and extending the no action assurance (No Action Assurance) issued on January 20, 2012 (attached), to the attached list of producers and importers of HCFC-22 and HCFC-142b – two types of hydrochlorofluorocarbons (HCFCs) regulated under 40 C.F.R. Part 82. This revised and extended No Action Assurance is being issued in response to a request set forth in the memorandum to me dated December 20, 2012, from Assistant Administrator for Air and Radiation Gina McCarthy (McCarthy Memorandum). As explained more fully below, this No Action Assurance establishes that the EPA will exercise its enforcement discretion not to pursue enforcement for violations of the prohibitions at 40 C.F.R. § 82.15 on consumption, production and importation of HCFC-22 and HCFC-142b without allowances if producers and importers do not exceed the amounts specified below.

EPA's regulations at 40 C.F.R. Part 82 prohibit the production and importation of HCFCs without possessing an allowance allocated by EPA for each kilogram of HCFC. The allowances allocated for the time period between 2004 and 2009 were established by the EPA in a 2003 rule (68 Fed. Reg. 2819), and the allowances allocated for the 2010-2014 period were set forth in a subsequent rule promulgated in December 2009 (the 2009 Rule). Each year, EPA also issues a letter to the producers and importers notifying them of their respective annual allocation of allowances based on these regulations.

Aspects of the 2009 Rule that relate to the allocations of HCFC-22 and HCFC-142b allowances for the 2010-2014 time period were challenged in the D.C. Circuit. On August 27, 2010, the Court issued a decision vacating the 2009 Rule in part. The other aspects of the 2009 Rule, including allocations of HCFC-123, HCFC-124, HCFC-225ca and HCFC-225cb allowances, were not challenged, and are not affected by this No Action Assurance.

On January 4, 2012, the EPA published a proposed rule to address the Court's vacatur of the 2009 Rule (77 Fed. Reg. 237) and to allocate calendar-year allowances for production and consumption. This rule is not yet final. The percentages listed in the proposed regulatory text, Section 82.16(a)(1), provided the following allowance amounts for 2012:

- A company with an HCFC-142b baseline would be allowed to produce or consume up to 4.9% of its baseline allowances listed at 40 CFR 82.17 and 82.19;
- A company with an HCFC-22 baseline would be allowed to produce or consume up to 17.7% of its baseline allowances listed at 40 CFR 82.17 and 82.19.

For calendar year 2013, the proposed regulation identifies options for calculation of the amounts of allowances. The McCarthy Memorandum identifies the lowest amount of allowances a company would receive under any of the options identified in the proposed regulation.¹ Those minimum amounts are as follows:

- HCFC-22 Production: Excluding Arkema, a company with an HCFC-22 production baseline would be allowed to produce up to 11.9% of its baseline allowances listed at 40 CFR 82.17; Arkema would be allowed to produce up to 14.7% of its baseline allowances listed at 82.17;
- HCFC-22 Consumption: Excluding Arkema and Solvay Fluorides, a company with an HCFC-22 consumption baseline would be allowed to consume up to 11.4% of its baseline allowances listed at 40 CFR 82.19; Arkema and Solvay Fluorides would be allowed to consume up to 14.7% of their baseline allowances listed at 82.19;
- HCFC-142b Production: Excluding Arkema, a company with an HCFC-142b production baseline would be allowed to produce up to 4.9% of its baseline allowances listed at 40 CFR 82.17; Arkema would be allowed to produce 0% of its baseline allowances listed at 82.17;
- HCFC-142b Consumption: Excluding Arkema and Solvay Solexis, a company with an HCFC-142b consumption baseline would be allowed to consume up to 4.9% of its baseline allowances listed at 40 CFR 82.19; Arkema and Solvay Solexis would be allowed to consume up to 0.4% of their baseline allowances listed at 82.19.

Only consumption, production and importation of HCFC-22 and HCFC-142b in amounts less than or equal to the amounts set forth above will be treated as included within the scope of this No Action Assurance.

This exercise of discretion is subject to the following conditions:

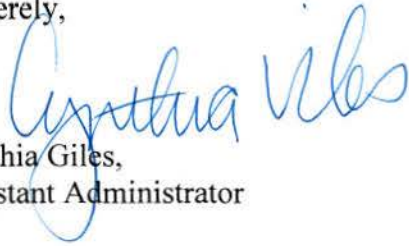
- Companies must continue to comply with recordkeeping and reporting requirements at 40 C.F.R. § 82.24, including quarterly production and import reports.
- Any HCFCs produced or imported in 2012 or 2013 pursuant to this No Action Assurance shall still count towards the company's 2012 or 2013 allocation and shall require the expenditure of allowances for the relevant control period.
- This exercise of discretion terminates 11:59 P.M., EST, December 31, 2013 or on the effective date of the EPA final rule governing HCFC allowances for calendar years 2012 and 2013, whichever occurs earlier.
- The EPA reserves the right to revoke or modify this No Action Assurance.

The issuance of a No Action Assurance for this period of time is in the public interest as it will prevent disruptions in the supply of HCFCs for refrigeration purposes. I believe this action will not increase environmental harm, as no additional allowances are or will be allocated based on this action.

¹ This minimum amounts are calculated based upon the use of recoupment options 3 and 4 discussed in the proposed rule. Those options are more fully discussed in the Recoupment Options Memorandum included in the docket for the pending rulemaking (EPA-HQ-OAR-2011-0354-0006).

If you have any further questions regarding this matter, please contact Charlie Garlow of my staff at (202) 564-1088 or garlow.charlie@epa.gov.

Sincerely,



Cynthia Giles,
Assistant Administrator

Enclosure

Cc: Gina McCarthy
Sarah Dunham
Drusilla Hufford

Producers and Importers of HCFC-22 and HCFC-142b

Companies with baseline allowances at 40 CFR §§82.17 and 82.19

ABCO Refrigeration Supply
Altair Partners
Arkema
Carrier Corporation
Coolgas Investment Property
DuPont
H.G. Refrigeration Supply
Honeywell
Mexichem Fluor Inc
Kivlan & Company
MDA Manufacturing
Mondy Global
National Refrigerants
Refricenter of Miami
Refricentro
R-Lines
Saez Distributors
Solvay Fluorides
Solvay Solexis
USA Refrigerants




Attachment 1
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

SEP 27 2013

ASSISTANT ADMINISTRATOR
FOR ENFORCEMENT AND
COMPLIANCE ASSURANCE

MEMORANDUM

SUBJECT: No Action Assurance for the NPDES Stormwater Multi-Sector General Permit for Industrial Activities

FROM: Cynthia Giles 

TO: Regional Administrators, Regions 1 - 10

This memorandum is to inform you of the pending lack of a Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity (MSGP) and to alert you to the Environmental Protection Agency's (EPA or Agency) current position on our civil enforcement response to this situation. The current MSGP under the National Pollutant Discharge Elimination System (NPDES) program will expire at midnight on September 29, 2013. The affected EPA Regions have signed a Federal Register notice announcing the proposed reissuance of the MSGP; however, the permit will not be finalized until approximately six months after the expiration of the 2008 MSGP. While facilities with coverage under the 2008 MSGP (available at http://www.epa.gov/npdes/pubs/msgp2008_finalpermit.pdf) will automatically be granted an administrative continuance of permit coverage and are required to continue to comply with the 2008 MSGP after its expiration, any new facilities that begin discharging stormwater associated with industrial activity after September 29, 2013 in those areas where EPA is the NPDES permitting authority will not be able to obtain general permit coverage until a new permit is issued.

Because a new general permit has not yet been promulgated that will cover such new facilities during the period after expiration of the 2008 MSGP and the effective date of the new MSGP, I have determined that it is appropriate to exercise my enforcement discretion and issue this "no action assurance" to address this gap in coverage. Specifically, the Agency will not pursue administrative or civil judicial enforcement actions for lack of permit coverage against new facilities that begin discharging stormwater associated with industrial activity after September 29, 2013, provided that these newly-discharging facilities meet the following requirements:

1. **Eligibility.** For coverage under this no action assurance, any new facility must meet the 2008 MSGP eligibility criteria.
2. **Prior Notification.** Prior to the discharge of stormwater associated with industrial activity after September 29, 2013 by a new facility, such facility must notify the

appropriate EPA NPDES permitting authority of both their operator status and intention to operate in accordance with the 2008 MSGP.

3. Compliance. Any new facility must comply with all obligations of the 2008 MSGP. These obligations include but are not limited to (a) Stormwater Pollution Prevention Plan (SWPPP) development and implementation, (b) proper installation and maintenance of best management practices, (c) stormwater discharge monitoring, (d) site inspections, (e) implementation of corrective action measures, and (f) any additional sector-specific requirements outlined in Part 8 of the 2008 MSGP. Any new facility must also submit the reports required pursuant to Part 7 of the 2008 MSGP directly to the appropriate EPA NPDES permitting authority.

This no action assurance does not apply to criminal violations or to situations where egregious circumstances exist which may cause serious harm or which may present an imminent and substantial endangerment to public health or the environment, or where no best management practices are in place to protect public health or the environment. The Agency also reserves the right, at any time, to exercise its discretion to address a specific discharge should circumstances warrant.

This no action assurance approach for new facilities that begin discharging stormwater associated with industrial activity after September 29, 2013 will terminate on March 30, 2014, or 30 days after the issuance of a new general permit, whichever comes first. EPA also reserves the right to withdraw or revise this no action assurance at any time. If you have any questions about this matter, please contact Mark Pollins, Director of the Water Enforcement Division, at (202) 564-4001.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JAN 22 2014

ASSISTANT ADMINISTRATOR
FOR ENFORCEMENT AND
COMPLIANCE ASSURANCE

Has Shah
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Washington, DC 20002

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Consumer Specialty Products Association
1667 K Street, NW, Suite 300
Washington, DC 20006

Susan Ferenc, President
Council of Producers and
Distributors of Agrotechnology
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Washington, DC 20036

Aaron Hobbs, President
Responsible Industry for a Sound Environment
1156 15th Street, NW, Suite 400
Washington, DC 20005

Jay J. Vroom, President
CropLife America
1156 15th Street, NW, Suite 400
Washington, DC 20005

Re: No Action Assurance Regarding Pesticide Export Labeling

Dear Sir/Madam:

I am writing to address concerns raised about an implementation issue involving the final rule, "Labeling of Pesticide Products and Devices for Export; Clarification of Requirements" (Export Labeling Rule). See 78 Fed. Reg. 4073 (Jan. 18, 2013). Industry stakeholders recently brought to the EPA's attention their concern that, as a result of this final rule, provisions for "supplemental labeling" no longer appear in the regulations. The omission of the supplemental labeling provisions in the final rule was inadvertent, and on December 19, 2013, the EPA publically announced its intent to expeditiously correct this problem through a revision to the current rule (see attached letter from Jay Ellenberger, Deputy Director, Field and External Affairs Division, U.S. Environmental Protection Agency, to Has Shah, Senior Director, American Chemistry Council). However, a rulemaking to correct this error is not expected to be final until after the compliance date in the Export Labeling Rule, which is January 21, 2014. Therefore, as provided in this letter, I am exercising my discretion to provide that the EPA will not pursue enforcement for violations of the pesticide export labeling requirements found in 40 C.F.R. Part 168, Subpart D subject to the conditions and limitations outlined in this letter.

Specifically, this no action assurance (NAA) is in response to a request from the Assistant Administrator for the Office of Chemical Safety and Pollution Prevention (OCSPP) and to concerns raised by industry stakeholders that the inability to use supplemental labeling caused by this inadvertent omission could create trade barriers, increase costs, and hamper other nations' ability to

properly place their own labels on these products. Implementation of the rule as it currently exists would also create an undue hardship on the pesticides industry by severely hampering their ability to export into international commerce and could result in significant and avoidable economic injury. The EPA agrees with these concerns and intends to expeditiously amend this regulation through a direct final rule. In the corrected rule EPA intends to (1) revise existing 40 C.F.R. §168.66 to remove the requirement to comply with the labeling requirements found in 40 C.F.R. §156.10(a)(4), and (2) include regulatory text that more closely resembles the language the Agency included in 40 C.F.R. §168.66 of the Export Labeling Rule as originally proposed. See 76 Fed. Reg. 18,995 (April 6, 2011). When final (which is anticipated to be in July 2014), the corrected rule would allow companies to use collateral labeling on the outside of shipping containers. However, there will be a “gap” between the compliance date of the Export Labeling Rule and the direct final rule the EPA intends to promulgate to correct the error for labeling requirements.

Accordingly, this NAA is intended to bridge this temporary gap and to avoid the hardships caused by the Export Labeling Rule which the EPA intends to correct through a direct final rule. Pursuant to this NAA, EPA will not enforce for violations of the pesticide export labeling requirements found in 40 C.F.R. Part 168, Subpart D solely for pesticides exported on or after January 21, 2014, subject to the following conditions and limitations:


- All pesticide products for export are labeled in a manner consistent with the “supplemental labeling” requirements of 40 C.F.R. §168.66 as originally proposed. See 76 Fed. Reg. at 18,999-19,000 (April 6, 2011).
- Entities exporting pesticide product must comply with all other requirements of the Export Labeling Rule.
- This NAA is to remain in effect for the above-listed pesticide export labeling provisions until either (1) 11:59 PM EDT, July 31, 2014, or (2) the effective date of a final rule addressing the omission of the supplemental labeling provisions in the Export Labeling Rule as described above, whichever occurs earlier.
- The EPA reserves the right to revoke or modify this NAA at any time.

OCSPP does not anticipate that this NAA for the limited period of time specified above will result in any new adverse environmental or safety risks. These shipments are for export only and will not be distributed in the U.S. for use by the public. In addition, the necessary safety and precautionary instructions as required by the Export Labeling Rule will accompany exports to ensure adequate safety for those handling products during the transportation of the goods.

Nothing in this No Action Assurance affects any other provisions in the Export Labeling Rule, other than those explicitly listed above, or any other legal requirement applicable to these products and the export of pesticides.

If you have any questions regarding this matter, please contact Tom Charlton of my staff at (202) 564-6960 or charlton.tom@epa.gov.

Sincerely,



Cynthia Giles

Attachment

cc: Jim Jones
Steve Bradbury



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

FEB 21 2014

OFFICE OF
ENFORCEMENT AND
COMPLIANCE ASSURANCE

Ms. Tracy Heinzman
Wiley, Rein & Fielding, L.L.P.
1776 K Street, N.W.
Washington, D.C. 20006

Re: No Action Assurance Regarding the Production of Methyl Bromide for 2014 Critical Uses

Dear Ms. Heinzman:

I am writing in response to your November 14, 2013, letter to the United States Environmental Protection Agency on behalf of the Methyl Bromide Industry Panel representing producers and importers, in which you request that the EPA not enforce restrictions on methyl bromide production and import found at 40 CFR § 82.4 until such time as the EPA's Office of Air and Radiation issues a final rule that authorizes the production and import of methyl bromide for critical uses in 2014.

EPA recently signed for publication a notice of proposed rulemaking authorizing critical use of methyl bromide for 2014. EPA intends to finalize the rule as quickly as feasible, after considering public comment. The EPA recognizes, however, that the current regulations only authorize the production, importation or use of critical use methyl bromide through December 31, 2013. Thus, there is no current regulatory authorization to produce, import or use methyl bromide for critical uses in 2014.

For the reasons outlined in your letter, the EPA will exercise its enforcement discretion not to pursue enforcement for violations of 40 CFR § 82.4 against companies identified in the proposed 2014 and 2015 critical use exemption rule as holders of critical use allowances for 2014, to produce, import or sell critical use methyl bromide for the proposed critical uses for 2014, in amounts not to exceed 410,984 kg. EPA will also exercise its enforcement discretion not to pursue enforcement for violations of 40 CFR § 82.4 against persons identified in the proposed rule as approved 2014 critical users who purchase or use critical use methyl bromide produced or imported by such companies for locations and uses identified as approved critical uses in the proposed rule. This exercise of discretion will begin immediately, and is subject to the following conditions:

- Companies must continue to report 2014 production and importation of methyl bromide to the EPA as required under the critical use regulations at 40 CFR § 82.13;
- Any critical use methyl bromide produced or imported in 2014 prior to the effective date of the final rule shall still count towards the company's 2014 allocation and, once the rule is effective, require the expenditure of 2014 vintage critical use allowances for all methyl bromide used during calendar year 2014;
- The allowance allocations are based on each company's proportionate share of allowances in the proposed rule, as follows:

Internet Address (URL) • <http://www.epa.gov>

- Chemtura: Preplant 234,358 kg; Post Harvest: 15,397 kg
 - Albemarle: Preplant 96,373 kg; Post Harvest: 6,332 kg
 - ICL-IP: Preplant 53,258 kg; Post Harvest: 3,499 kg
 - TriCal: Preplant 1,658 kg; Post Harvest: 109 kg
- Companies and critical users identified in the proposed rule must comply with all requirements of 40 CFR § 82.4 and the proposed rule;
 - This exercise of discretion terminates upon the effective date of the final rule for 2014 or 11:59 E.D.T., July 31, 2014, whichever occurs earlier; and
 - The EPA reserves the right to revoke or modify this no action assurance.

The issuance of a no action assurance for this short period of time is in the public interest as it will prevent disruptions in critical pest control activities. I believe that this action will not increase environmental harm, as no additional allowances are or will be allocated based on this action.

If you have any further questions regarding this matter, please contact Charles Garlow, 202-564-1088.

Sincerely,



Cynthia Giles,
Assistant Administrator

cc: Janet McCabe
Acting Assistant Administrator, Office of Air and Radiation



Attachment 2
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAR 27 2014

OFFICE OF
WATER

MEMORANDUM

SUBJECT: Request to Extend the No Action Assurance for New Industrial Facilities Needing Stormwater Permit Coverage

FROM: Nancy Stoner *Michael Albin*
Acting Assistant Administrator
Office of Water (OW)

TO: Cynthia Giles
Assistant Administrator
Office of Enforcement and Compliance Assurance (OECA)

The purpose of this memorandum is to request that the Office of Enforcement and Compliance Assurance (OECA) extend the No Action Assurance (NAA) issued on September 27, 2013 (copy attached). This NAA addressed new industrial facilities needing National Pollutant Discharge Elimination System (NPDES) general permit coverage for their stormwater discharges in areas where EPA is the permitting authority after the expiration of the 2008 Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity (MSGP). The NAA was intended to "bridge" the period between the expiration of the 2008 MSGP and the issuance of the new MSGP. The NAA is scheduled to expire on March 30, 2014 or upon the issuance of the new MSGP, whichever is earlier. However, for the reasons outlined below, events, many of which were unanticipated and unpreventable, have served to delay the final MSGP. Accordingly, I am requesting that OECA extend the September 27, 2013 NAA to continue the bridge to the final permit, which we now expect to issue by September 30, 2014.

Background

The 2008 MSGP expired at midnight on September 29, 2013. The Federal Register notice announcing the proposed reissuance of the MSGP was published on September 27, 2013. Because of this timing, the final MSGP could not be finalized for several months after the expiration of the 2008 MSGP. Facilities that obtained coverage under the 2008 MSGP prior to its expiration were automatically granted an administrative continuance of permit coverage; the administrative continuance will remain in effect until a new permit is issued. Therefore, facilities already covered under the 2008 MSGP are not required to submit a new Notice of Intent (NOI) for permit coverage until the new MSGP is issued, and these facilities must continue to comply with all of the requirements in the 2008 permit, including requirements for monitoring and reporting. Until the new MSGP is issued, however, "new" facilities (*i.e.*, those facilities not covered under the 2008 MSGP) that begin discharging industrial stormwater after September 29, 2013 are unable to file an NOI for general permit coverage. The

September 27, 2013 NAA covered these newly-discharging facilities, provided that these facilities: (1) meet the 2008 MSGP eligibility criteria; (2) notify the appropriate EPA permitting authority of their operator status and their intention to operate in accordance with the 2008 MSGP; and (3) comply with all requirements of the 2008 MSGP, including, but not limited to, stormwater pollution prevention plan (SWPPP) development and implementation and proper installation and maintenance of best management practices.

Basis and Need for an Extension

The reissuance of the MSGP is behind schedule for several reasons, many of which were beyond the Agency's control. The government shutdown occurred immediately after the permit was proposed, which prevented progress on various tasks required to reissue the permit, including consultations under the Endangered Species Act (ESA), the National Historic Preservation Act (NHPA), and the development of the electronic Notice of Intent (eNOI) system. Additionally, at the request of commenters and the Office of Management and Budget (OMB), the original 60-day public comment period was extended an additional 30 days, and did not close until December 26, 2013. Seventy-six comment letters were received which raised 550 separate issues that need to be addressed prior to options selection and final agency review (FAR). Several issues raised by commenters (*e.g.*, comments on new requirements for discharges to Federal CERCLA sites, comments on the incorporation of the new aircraft deicing Effluent Limitation Guideline, comments from the mining industry) are particularly challenging to address, and are requiring a significant expenditure of additional staff resources. The breadth and scope of many of the issues raised in the comments was unanticipated. Consequently, the Office of Water (OW) anticipates that it will take approximately six additional months to issue the final MSGP. The required steps to finalize the permit include approximately two months to address all of the comment issues and to make final changes to the permit, approximately one month to complete the options selection and FAR processes, and 90 days of OMB review. During this timeframe, OW will continue to be engaged in consultations under the ESA and the NHPA, will complete an Environmental Assessment under the National Environmental Policy Act and will work with your staff to complete the new eNOI system.

During the period of time that the MSGP expired in September 2013 and before it is reissued later this year, OW anticipates that approximately 40 new industrial facilities will need NPDES general permit coverage for their stormwater discharges in areas where EPA is the NPDES permitting authority. Because these new facilities will not have the ability to obtain coverage under a general permit, OW requests that OECA extend the September 27, 2013 NAA. As provided under the current NAA, we are requesting that to be covered under an extended NAA facilities must continue to: (1) meet the 2008 MSGP eligibility criteria; (2) notify the appropriate EPA permitting authority of their operator status and their intention to operate in accordance with the 2008 MSGP; and, (3) comply with all requirements of the 2008 MSGP, including, but not limited to, SWPPP development and implementation and proper installation and maintenance of best management practices.

Thank you for your consideration of this request. If you have questions or require additional information please contact me or Connie Bosma of my staff at 564-6773.

Attachment



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAR 27 2014

ASSISTANT ADMINISTRATOR
FOR ENFORCEMENT AND
COMPLIANCE ASSURANCE

MEMORANDUM

SUBJECT: Extension of No Action Assurance for the NPDES Stormwater Multi-Sector General Permit for Industrial Activities

FROM: *for* Cynthia Giles
Assistant Administrator

TO: Regional Administrators, Regions 1 - 10

This memorandum is to inform you of the continued lack of a final Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity (MSGP) and to remind you of the Environmental Protection Agency's (EPA or Agency) position on our civil enforcement response to this situation. The current MSGP under the National Pollutant Discharge Elimination System (NPDES) program expired at midnight on September 29, 2013. The Federal Register notice announcing the proposed reissuance of the MSGP was published on September 27, 2013. While facilities with coverage under the 2008 MSGP were automatically granted an administrative continuance of permit coverage and are required to continue to comply with the 2008 MSGP after its expiration, any new facilities that begin discharging stormwater associated with industrial activity after September 29, 2013 in those areas where EPA is the NPDES permitting authority are not able to obtain general permit coverage until a new permit is issued.

To address this gap in coverage, on September 27, 2013, I exercised my enforcement discretion to cover these newly-discharging facilities, provided that these facilities: (1) meet the 2008 MSGP eligibility criteria; (2) notify the appropriate EPA permitting authority of their operator status and their intention to operate in accordance with the 2008 MSGP; and (3) comply with all requirements of the 2008 MSGP, including, but not limited to, stormwater pollution prevention plan (SWPPP) development and implementation and proper installation and maintenance of best management practices (Attachment 1). That exercise of discretion was to be effective until March 30, 2014, or upon the issuance of a new MSGP, whichever came first. However, as detailed in a March 2014, memorandum from Nancy Stoner, Acting Assistant Administrator, Office of Water (Attachment 2), for reasons outside the Agency's control the new MSGP will not be finalized until the end of September, 2014, approximately twelve months after the expiration of the 2008 MSGP.

Because a new general permit has not yet been promulgated that will cover such new facilities during the period after expiration of the 2008 MSGP and the effective date of the new MSGP, I have determined that it is appropriate to exercise my enforcement discretion to extend the September 27, 2013, “no action assurance” to address this continuing gap in coverage. Specifically, the Agency will not pursue administrative or civil judicial enforcement actions for lack of permit coverage against new facilities that begin discharging stormwater associated with industrial activity after September 29, 2013, provided that these newly-discharging facilities meet the following requirements:

1. Eligibility. For coverage under this no action assurance, any new facility must meet the 2008 MSGP eligibility criteria.
2. Prior Notification. Prior to the discharge of stormwater associated with industrial activity after September 29, 2013 by a new facility, such facility must notify the appropriate EPA NPDES permitting authority of both its operator status and intention to operate in accordance with the 2008 MSGP.
3. Compliance. Any new facility must comply with all obligations of the 2008 MSGP. These obligations include but are not limited to (a) Stormwater Pollution Prevention Plan (SWPPP) development and implementation, (b) proper installation and maintenance of best management practices, (c) stormwater discharge monitoring, (d) site inspections, (e) implementation of corrective action measures, and (f) any additional sector-specific requirements outlined in Part 8 of the 2008 MSGP. Any new facility must also submit the reports required pursuant to Part 7 of the 2008 MSGP directly to the appropriate EPA NPDES permitting authority.

This no action assurance does not apply to criminal violations or to situations where egregious circumstances exist which may cause serious harm or which may present an imminent and substantial endangerment to public health or the environment, or where no best management practices are in place to protect public health or the environment. The Agency also reserves the right, at any time, to exercise its discretion to address a specific discharge should circumstances warrant.

This no action assurance approach for new facilities that begin discharging stormwater associated with industrial activity after September 29, 2013 will terminate on September 30, 2014, or 30 days after the issuance of a new general permit, whichever comes first. EPA also reserves the right to withdraw or revise this no action assurance at any time. If you have any questions about this matter, please contact Mark Pollins, Director of the Water Enforcement Division, at (202) 564-4001.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUL 30 2014

OFFICE OF
ENFORCEMENT AND
COMPLIANCE ASSURANCE

Has Shah
American Chemistry Council
700 2nd Street, NE
Washington, DC 20002

Christopher Cathcart, President
Consumer Specialty Products Association
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Washington, DC 20006

Susan Ferenc, President
Council of Producers and
Distributors of Agrotechnology
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Aaron Hobbs, President
Responsible Industry for a Sound Environment
1156 15th Street, NW, Suite 400
Washington, DC 20005

Jay J. Vroom, President
CropLife America
1156 15th Street, NW, Suite 400
Washington, DC 20005

Re: No Action Assurance Regarding Pesticide Export Labeling Extension

Dear Sir/Madam:

I am writing to respond to concerns raised about the upcoming expiration of the No Action Assurance that I issued on January 22, 2014. As provided in this letter, I am again exercising my discretion to provide that the EPA will not pursue enforcement for violations of the pesticide export labeling requirements found in 40 C.F.R. Part 168, Subpart D subject to the conditions and limitations outlined in this letter.

On January 22, 2014, I issued a No Action Assurance (NAA) to address an implementation issue concerning the final rule, "Labeling of Pesticide Products and Devices for Export; Clarification of Requirements" (Export Labeling Rule). See 78 Fed. Reg. 4073 (Jan. 18, 2013). The Agency issued the NAA (attached) in response to industry stakeholder concerns that, because of this final rule, provisions for "supplemental labeling" no longer appear in the regulations. As noted in the January 22, 2014 NAA the omission of the supplemental labeling provisions in the final rule was inadvertent, and EPA intended to immediately promulgate a rule to address this error. Therefore, the NAA issued in January was intended to address a number of hardships and avoid significant economic injuries by serving as a temporary bridge to cover the gap between the compliance date of the Export Labeling Rule (January 21, 2014) and the projected effective date of a direct final rule that would have corrected this inadvertent omission.

The direct final rule was published in the Federal Register on April 30, 2014 (79 Fed. Reg. 24,347). The EPA received several comments during the 30-day comment period. As a result, EPA was required to withdraw the direct final rule and to issue a notice of proposed rulemaking (NPRM) to correct the supplemental labeling omission. The notice of withdrawal and the NPRM were published in the Federal Register on July 11, 2014. Because the Agency withdrew the direct final rule, there continues to be a gap between the current rule's requirements and the effective date of a new rule correcting the omission of the supplemental labeling requirements. Therefore, at the request of the Assistant Administrator for the Office of Chemical Safety and Pollution Prevention (OCSPP) and for the same reasons articulated in the NAA of January 22, I am continuing to exercise my discretion to provide that EPA will not pursue enforcement for violations of the pesticide export labeling requirements found in 40 C.F.R. Part 168, Subpart D as provided below.

This NAA is intended to bridge the temporary gap and avoid the hardships caused by the inadvertent omission of "supplemental labeling" provisions in the Export Labeling Rule which the EPA intends to correct through a final rule. Pursuant to this NAA, EPA will not enforce for violations of the pesticide export labeling requirements found in 40 C.F.R. Part 168, Subpart D solely for pesticides exported on or after July 31, 2014, subject to the following conditions and limitations:

- All pesticide products for export are labeled in a manner consistent with the "supplemental labeling" requirements of 40 C.F.R. § 168.66 as originally proposed. See 76 Fed. Reg. at 18,999-19,000 (April 6, 2011).
- Entities exporting pesticide products must comply with all other requirements of the Export Labeling Rule.
- This NAA is to remain in effect for the above-listed pesticide export labeling provisions until either (1) 11:59 PM EST, February 28, 2015, or (2) the effective date of a final rule addressing the omission of the supplemental labeling provisions in the Export Labeling Rule as described above, whichever occurs earlier.
- The EPA reserves the right to revoke or modify this NAA at any time.

OCSPP does not anticipate that this NAA for the limited period of time specified above will result in any new adverse environmental or safety risks. These shipments are for export only and will not be distributed in the U.S. for use by the public. In addition, the necessary safety and precautionary instructions as required by the Export Labeling Rule will accompany exports to ensure adequate safety for those handling products during the transportation of the goods.

Nothing in this No Action Assurance affects any other provisions in the Export Labeling Rule, other than those explicitly listed above, or any other legal requirement applicable to these products and the export of pesticides.

If you have any questions regarding this matter, please contact Tom Charlton of my staff at (202) 564-6960 or charlton.tom@epa.gov.

Sincerely,



Cynthia Giles

Attachment

cc: Jim Jones
Jack Housenger



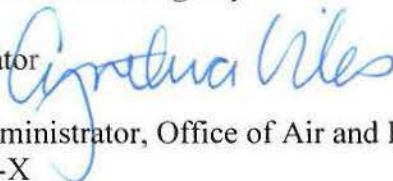
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

DEC 19 2014

ASSISTANT ADMINISTRATOR
FOR ENFORCEMENT AND
COMPLIANCE ASSURANCE

MEMORANDUM

SUBJECT: No Action Assurance Regarding EPA-Issued Step 2 Prevention of Significant Deterioration Permits and Related Title V Requirements Following *Utility Air Regulatory Group v. Environmental Protection Agency*

FROM: Cynthia Giles, Assistant Administrator 

TO: Janet McCabe, Acting Assistant Administrator, Office of Air and Radiation
Regional Administrators, Regions I-X

On July 24, 2014, the Office of Air and Radiation (OAR) and the Office of Enforcement and Compliance Assurance (OECA) jointly issued a memorandum in response to the Supreme Court's decision in *Utility Air Regulatory Group (UARG) v. Environmental Protection Agency (EPA)*, 124 S.Ct. 2427 (2014). See "Next Steps and Preliminary Views on the Application of Clean Air Act Permitting Programs to Greenhouse Gases Following the Supreme Court's Decision in *Utility Air Regulatory Group v. Environmental Protection Agency*" (July 24, 2014) (available at <http://www.epa.gov/nsr/documents/20140724memo.pdf>). In that memorandum, the agency provided its preliminary thinking on the implications of the decision for PSD permits issued to "Step 2" sources. Generally speaking, Step 2 sources¹ are sources that were classified as major, and required to obtain a Prevention of Significant Deterioration (PSD) or title V permit, based solely on greenhouse gas (GHG) emissions. The Supreme Court decision in *UARG* held that the EPA may not treat GHGs as an air pollutant for purposes of determining whether a source is a major source required to obtain a PSD or title V permit and that EPA's regulations implementing that approach are invalid. The July 24, 2014 memorandum indicated that the agency planned "to provide additional views in the future with respect to Step 2 sources that have already obtained a PSD permit" and noted that it might be appropriate to "remove GHG BACT limitations from such permits and convert such permits into minor source permits where this is feasible and minor source requirements remain applicable."

¹ Such sources are generally known as "Step 2" sources because the EPA deferred the requirement for such sources to obtain PSD and title V permits until Step 2 of its phase-in of permitting requirements for greenhouse gases under the Prevention of Significant Deterioration and title V Greenhouse Gas Tailoring Rule, 75 Fed. Reg. 31514, 35569-71 (June 3, 2010); 40 C.F.R. § 52.21(b)(49)(v).

Today, OAR provided further information on how it intends to proceed regarding EPA-issued Step 2 PSD permits.² More specifically, the EPA described its intention to undertake a rulemaking action to revise 40 C.F.R. § 52.21(w) of EPA's PSD regulations to enable EPA to apply section 52.21(w) to rescind EPA-issued Step 2 PSD permits consistent with EPA's understanding of the Supreme Court's decision. The EPA expects to be able to complete this rule no later than December 31, 2015. After the appropriate revisions to 40 C.F.R. § 52.21 are completed, EPA will then proceed to rescind EPA-issued Step 2 PSD permits in response to requests from applicants that can demonstrate they are eligible for rescission.

As noted in OAR's memorandum, it may be December 31, 2015 before the EPA completes the rulemaking process that will allow the agency to rescind any Step 2 PSD permits that it issued under the regulations the Supreme Court held to be invalid. We are aware that the agency has already received requests to rescind some EPA-issued Step 2 PSD permits, and to issue a No Action Assurance regarding some EPA-issued Step 2 PSD permit provisions in the interim.³

The EPA is sensitive to the difficulties faced by sources that have EPA-issued Step 2 PSD permit requirements that may remain in place until EPA can fully implement the Supreme Court's decision. Thus, OECA is issuing the narrowly-tailored No Action Assurance set forth below to sources with EPA-issued Step 2 PSD permits. The Supreme Court's decision finding portions of EPA's regulations to be invalid is an "extremely unusual circumstance[] where an assurance is clearly necessary to serve the public interest" and, until EPA's rulemaking process is complete, no other mechanism is adequate to address the situation. *See* "Processing Requests for Use of Enforcement Discretion," at 2 (Mar. 3, 1995); "Policy Against 'No Action' Assurances (Nov. 16, 1984). The public interest that is served in this instance is the granting of interim relief from GHG terms and conditions in EPA-issued Step 2 PSD permits that may be rescinded after the Supreme Court decision, any related terms and conditions in title V permits, and specific title V regulatory requirements that may be triggered by the existence of EPA-issued Step 2 PSD permits.

No Action Assurance for EPA-Issued Step 2 PSD Permit Terms and EPA-Issued Step 2 PSD Permit Terms in Title V Permits

This No Action Assurance establishes that the EPA will exercise its enforcement discretion not to pursue enforcement of the terms and conditions relating to GHGs in a source's EPA-issued Step 2 PSD permit, and for related GHG terms and conditions that are contained in the source's title V permit, if any.

² In this memorandum, the term "EPA-issued Step 2 PSD permit" includes Step 2 PSD permits issued by the EPA Regions, as well as Step 2 PSD permits issued by states delegated to issue permits on EPA's behalf under 40 C.F.R. § 52.21. *See* 40 C.F.R. §52.21(u). The term "state-issued Step 2 PSD permits" refers to Step 2 PSD permits issued by states pursuant to the applicable EPA-approved State Implementation Plan provisions.

³ Sources seeking a No Action Assurance may fall into one of three categories; they could have (1) built their facility consistent with the Step 2 PSD permit and have started operations, but seek relief from operational requirements in the permit, (2) built the facility consistent with the Step 2 PSD permit, but have not started operations and seek relief from testing and operational requirements in the permit, or (3) not finished construction and seek relief from all aspects of the permit.

This No Action Assurance applies only to potential violations of the GHG requirements in an EPA-issued Step 2 PSD permit itself (and related title V permit terms, if any). In other words, the EPA will exercise its discretion to not include a count for violating the GHG requirements in an EPA-issued Step 2 PSD permit (or any related terms in a title V permit) in any enforcement action, as provided in this memorandum.

However, there are three important limitations on the scope of this No Action Assurance. First, as outlined above, the No Action Assurance applies only to the GHG-related terms and conditions in an EPA-issued Step 2 PSD permit (and any related terms in a title V permit). The No Action Assurance does not apply to any terms or conditions of an EPA-issued Step 2 PSD permit which apply to non-GHG pollutants. For example, as noted in the July 24 memorandum and OAR's memorandum of today, a source with an EPA-issued Step 2 PSD permit may now have other regulatory or permitting obligations (*e.g.*, minor New Source Review (NSR) requirements, which generally concern sources emitting pollutants subject to National Ambient Air Quality Standards (NAAQS)). The source may have previously not needed to obtain a minor NSR permit because it was previously considered a major source and obtained an EPA-issued Step 2 PSD permit to satisfy its preconstruction permitting obligations. Until such time as the source and the state permitting authority can determine whether and how to replace Step 2 PSD permit conditions for such pollutants with a permit satisfying minor NSR requirements, continued compliance with PSD permit terms and conditions for such pollutants is important to protect the NAAQS.

Second, if a source's action that is in violation of a GHG condition in an EPA-issued Step 2 PSD permit triggers another requirement, or violates another state or federal requirement, then the EPA may enforce that separate (non-Step 2 PSD permit) requirement. For example, the source may wish to confirm that the existence of, and compliance with, the EPA-issued Step 2 PSD permit is not considered a necessary method for complying with other federal, state or local requirements (*e.g.*, the state is presuming the source builds consistent with the efficiency requirement in the EPA-issued Step 2 permit in order to satisfy other state air pollution requirements). Therefore, sources are encouraged to consult with their state or local air pollution control agency before deciding how to proceed regarding their EPA-issued Step 2 PSD permit.

Third, this No Action Assurance does not grant relief from requirements that, while similar or identical to the EPA-issued Step 2 PSD permit terms, are mandated by separate statutory or regulatory provisions. For example, a source may be required to install and operate a carbon dioxide (CO₂) monitor under the EPA-issued Step 2 PSD permit, but it may also be required to install and operate a CO₂ monitor pursuant to the Acid Rain regulations at 40 C.F.R. Part 75. Accordingly, this No Action Assurance would cover only the CO₂ monitoring requirement in the EPA-issued Step 2 PSD permit (and any related title V permit terms), and would not cover any other requirements related to CO₂ monitors.

No Action Assurance for Title V Regulatory Requirements

As noted in OAR's memorandum, the EPA understands that title V permitting authorities and sources with EPA-issued Step 2 PSD permits have asked about the extent to which such sources

need to address the EPA-issued Step 2 PSD permit requirements in an application for a title V permit. A permitting authority and a few sources have also asked whether they should submit such a title V permit application at all. Consistent with the July 24, 2014 memorandum, and in order to act consistently with our understanding of the Supreme Court's decision pending regulatory action to effectuate that decision, the EPA will exercise its enforcement discretion not to pursue enforcement of provisions of Federal regulations or provisions in EPA-approved title V programs to the extent that the provisions:

- (1) Require a source to obtain a title V permit solely because it has an EPA-issued Step 2 PSD permit;
- (2) Require a source to incorporate and assure compliance with EPA-issued Step 2 PSD permit conditions in a new title V permit the source is obtaining based on non-GHG emissions or requirements; or
- (3) Require a source with an existing title V permit to amend its title V permit to incorporate and assure compliance with the terms and conditions of an EPA-issued Step 2 PSD permit.

Effective Date of the No Action Assurance

As noted in today's OAR memorandum on this matter, the revisions to 40 C.F.R. § 52.21(w) may not be final until December 31, 2015; EPA will then need to receive and process any requests to rescind EPA-issued Step 2 PSD permits, and state permitting agencies may need to subsequently revise title V permits. Therefore, this No Action Assurance is effective immediately to sources with EPA-issued Step 2 permits, and it will remain in effect for all covered sources until 11:59 PM EDT, September 30, 2016. This No Action Assurance ceases to apply to a source once its EPA-issued Step 2 PSD permit is rescinded, and if applicable, its title V permit is accordingly revised, whichever is later.

The EPA reserves the right to revoke or modify this No Action Assurance at any time.

State-Issued Step 2 PSD Permits and Any Related Title V Requirements Are Not Covered

As discussed above, this No Action Assurance applies only to the GHG-related terms and conditions of certain EPA-issued Step 2 PSD permits and any related title V permit provisions, and those title V regulatory requirements that may be triggered by the existence of the EPA-issued Step 2 PSD permit. It does not apply to state-issued Step 2 PSD permits (permits issued by states with an approved PSD program in its State Implementation Plan), any related title V permit provisions, or any title V permit or regulatory requirements that may be triggered by the existence of the state-issued Step 2 PSD permit.

This No Action Assurance does not extend to state-issued Step 2 PSD permits because the EPA is not able to determine at this time whether other state authority-based mechanisms (*e.g.*, state authority to rescind the permit) are available to provide relief from the state-issued Step 2 PSD

permit requirements under state law.⁴ In addition, as stated in the July 24 memorandum, we do not read the Supreme Court's decision as precluding states from retaining permitting requirements for major sources of GHG emissions to the extent state law provides independent authority to do so. The EPA also does not want to pre-judge an approved state's decisions regarding its response to the Supreme Court's decision; therefore, sources with state-issued Step 2 PSD permits should consult their state permitting agency regarding the actions that the state intends to take with regard to its Step 2 PSD permit.

Contact Information

If you have any questions about this No Action Assurance memorandum, please contact Apple Chapman at (202) 564-5666, or chapman.apple@epa.gov.

⁴ As noted above, a No Action Assurance is appropriate only when there is "no other mechanism" available to address the situation. As explained in the OAR memorandum, there will be an unavoidable delay in rescinding EPA-issued Step 2 PSD permits, and until that time there is no other mechanism available to the EPA (or delegated states) with respect to those permits.



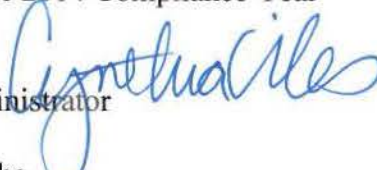
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAY 21 2015

OFFICE OF
ENFORCEMENT AND
COMPLIANCE ASSURANCE

MEMORANDUM

SUBJECT: Conditional No Action Assurance Regarding RFS Attest Engagement Reporting
Deadline for the 2014 Compliance Year

FROM: Cynthia Giles 
Assistant Administrator

TO: Janet G. McCabe
Acting Assistant Administrator
Office of Air and Radiation

Pursuant to your request of May 15, 2015 (attached), I am today providing a “no action assurance” (No Action Assurance) relating to the June 1, 2015 attest engagement reporting deadline for the 2014 compliance year under the Renewable Fuel Standard (RFS) program, as provided in this memorandum.

Because of delays in promulgating the final annual volume percentage requirements for the 2014 compliance year, the RFS annual reporting deadlines are out of sequence. Regulated parties are required to submit “attest engagement reports” for the 2014 compliance year by June 1, 2015. However, regulated parties are not yet required to submit their attest engagement reports for the 2013 compliance year, which makes it impractical for certain regulated parties to complete their attest engagement reports by June 1, 2015.

As noted in your memorandum, the EPA therefore has committed to issue a rule to amend these reporting deadlines.¹ Specifically, the EPA intends to propose to change the attest engagement reporting deadline for the 2014 compliance year for renewable identification number (RIN)-generating renewable fuel producers (domestic and foreign), RIN-generating importers, other parties owning RINs and independent third-party auditors from June 1, 2015, to January 31, 2016.²

Consistent with the intent and purpose of this proposed regulatory action, this No Action Assurance provides that the EPA will exercise its enforcement discretion not to pursue enforcement actions against

¹ See also Enviroflash notification, “Upcoming Announcement of Proposed Changes to RFS Reporting Deadlines” (May 19, 2015) (notification of intent to revise attest reporting deadlines).

² The attest engagement requirements for RIN-generating renewable fuel producers (domestic and foreign), RIN-generating importers, other parties owning RINs, and independent third-party auditors are found at 40 C.F.R. § 80.1464(b), (c) and (i). The deadline to submit these reports is set forth at 40 C.F.R. § 80.1464(d).

a RIN-generating renewable fuel producer (domestic and foreign), a RIN-generating importer, any other party owning RINs, and an independent third-party auditor solely for violations of the 2014 attest engagement reporting deadline at 40 C.F.R. § 80.1464(d). This No Action Assurance does not apply to the June 1, 2015 deadline for exporters of fuel to submit their reports for the 2014 compliance year, nor does it extend to any other RFS-related requirement.³ Furthermore, as applied to an individual regulated party, this No Action Assurance is conditioned upon the regulated party complying with all other RFS requirements applicable to it. This No Action Assurance will remain in effect until either (1) 11:59 PM EST, January 30, 2016, or (2) the effective date of a final rule addressing the 2014 attest engagement deadlines, whichever occurs earlier.

The issuance of this No Action Assurance is in the public interest to alleviate confusion and ensure the orderly administration of the RFS program. In addition, I understand that this action will not result in any adverse environmental impacts, as no requirements to comply with the RFS volume standards nor any requirements to comply with emission standards are affected by this action. The EPA reserves its right to revoke or modify this No Action Assurance.

If you have any further questions regarding this matter, please contact Jeff Kodish, of my staff, at (303) 312-7153, or kodish.jeff@epa.gov.

Attachment

cc: Byron Bunker, OAR, OTAQ
Susan Shinkman, OECA, OCE
Phillip Brooks, OCE, OCE, AED

³ The EPA provided guidance regarding the 2014 attest engagement reporting deadlines for renewable fuel exporters in its March 17, 2015 Enviroflash.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAY 15 2015

OFFICE OF
AIR AND RADIATION

MEMORANDUM

SUBJECT: Enforcement Discretion of the Attest Engagement Reporting Deadline for the 2014 Compliance Year

FROM: Janet G. McCabe *JGM*
Acting Assistant Administrator

TO: Cynthia Giles, Assistant Administrator
Office of Enforcement and Compliance Assurance

The Office of Air and Radiation requests that the Office of Enforcement and Compliance Assurance exercise enforcement discretion regarding the June 1, 2015 attest engagement reporting deadlines in the Renewable Fuel Standard (RFS) program for the 2014 compliance year. Specifically, OAR requests that OECA exercise enforcement discretion as a bridge to a final rulemaking that will set the 2014 annual volume percentages and change associated attest engagement reporting deadlines. We anticipate this final rule will be signed no later than November 30, 2015.

As you know, the 2014 annual volume-setting rule has proven to be very challenging. We were not able to finalize the volume requirement for 2014 in a timely manner. In 2014, we amended the RFS program regulations to delay the program's 2013 reporting deadlines because we had not yet finalized the 2014 RFS volume standards. As a result, the current regulations include reporting deadlines that are out of sequence such that the 2013 reporting deadlines follow the 2014 reporting deadlines. This makes it impractical for certain regulated parties to comply with certain reporting deadlines.

As a part of the proposed RFS volume standards for 2014, 2015, and 2016, we will also be proposing changes to the annual compliance demonstration and attest engagement reporting deadlines for the 2013, 2014, and 2015 compliance years. The agency will propose to amend these reporting deadlines in order to put them back in sequential order, as well as to provide an appropriate amount of time between the deadlines for the 2013, 2014, and 2015 annual compliance reports and attest engagement reports.

The current regulations at 40 CFR 80.1464(d) require regulated parties to submit attest engagement reports for the 2014 compliance year by June 1, 2015. On March 17, 2015, we issued an Enviroflash notice to clarify that obligated parties (refiners and importers of gasoline and diesel fuel) are not required to submit 2014 compliance demonstration reports or the associated attest engagement reports until the agency issues a final rule establishing the final 2014 RFS standards and sets (in that action) a compliance demonstration deadline for those standards. The agency interpreted the annual compliance demonstration and attest engagement reporting deadlines at 40 CFR 80.1451(a) and 80.1464(a) and (d) to be inoperative for obligated parties for the 2014 compliance year because final RFS standards for

2014 have not been established, and it is therefore impossible for obligated parties to assess their compliance with the applicable standards. At the same time, we clarified in the Enviroflash that exporters of renewable fuel must submit at a minimum partial compliance demonstration and attest engagement reports by the respective regulatory deadlines and full reports following publication of the 2014 RFS volume rule because an exporter's compliance obligation is determined entirely by the volume and type of renewable fuel exported and not the renewable fuel volume percentage standards. It is therefore possible for exporters to partially or fully meet the current regulatory reporting deadlines including the June 1, 2015 deadline for attest engagement reports.

The Enviroflash did not specifically address the attest engagement requirements for parties other than obligated parties and exporters. Following issuance of the March 17, 2015 Enviroflash, the agency received comments from attest engagement auditors indicating that it would be impractical for certain other parties to meet the June 1, 2015 attest engagement deadline at 40 CFR 80.1464(d) for the 2014 compliance year. The auditors explained that they generally rely on the beginning balance of Renewable Identification Numbers (RINs) based on attest procedures performed in the previous year, and that it would be impractical for them to do this since the agency delayed the 2013 attest engagement deadlines until after the 2014 attest engagement deadline.

In order to address these concerns, the agency will propose to change the June 1, 2015 attest engagement reporting deadline for the 2014 compliance year for RIN-generating renewable fuel producers (domestic and foreign), RIN-generating importers, and other parties owning RINs to January 31, 2016.¹ Since independent third-party auditor annual attest requirements are dependent upon the submission of the RIN verification reports to the EPA, the agency will also propose to delay the 2014 attest engagement reporting deadline for independent third-party auditors from June 1, 2015 to January 31, 2016.

Accordingly, we request that the OECA exercise its enforcement discretion to not pursue enforcement actions against RIN-generating renewable fuel producers (domestic and foreign), RIN-generating importers, other parties owning RINs, and independent third-party auditors for violations of the 2014 attest engagement reporting deadlines at 40 CFR 80.1464(d) until 11:59 PM EDT, January 30, 2016, or the effective date of a final rule addressing the 2014 attest engagement deadlines, whichever occurs earlier. We do not anticipate that this action will result in any adverse environmental impacts, as no requirements to comply with the RFS volume standards are affected by this action.

Please contact Byron Bunker on my staff if you have any questions.

Attachment: Enviroflash

cc: Phillip A. Brooks, Director, Air Enforcement Division, OECA
Christopher Thompson, Chief, Western Field Office, Air Enforcement Division, OECA
Jeff Kodish, Fuels Team Leader, Air Enforcement Division, OECA

¹ The attest engagement requirements for RIN-generating renewable fuel producers (domestic and foreign), RIN-generating importers, other parties owning RINs, and independent third-party auditors are found at 40 CFR 80.1464(b),(c) and (i), and the associated deadline is specified in 40 CFR 80.1464(d).

From: EnviroFlash [<mailto:enviroflash@epa.gov>]
Sent: Tuesday, March 17, 2015 2:19 PM
To: Kodish, Jeff
Subject: RFS Annual Compliance Deadline

This Enviroflash relates to the dates that obligated parties and exporters must file their annual compliance demonstration reports and associated attest engagement reports required by 40 CFR 80.1451(a) and 80.1464(a). EPA is today clarifying that obligated parties (refiners and importers of gasoline and diesel fuel) under the Renewable Fuel Standard (RFS) program are not required to submit compliance demonstration reports (or associated attest engagements) for the 2014 standards until EPA issues a final rule establishing the final 2014 RFS standards and sets (in that action) a compliance demonstration deadline for those standards.

Under the Clean Air Act, EPA establishes RFS percentage standards through annual rulemaking. The Act provides that rulemaking for a given compliance year is to be completed by November 30 of the prior year. However, on December 9, 2014, the EPA issued a Federal Register Notice announcing that it would not be finalizing the 2014 percentage standards under the RFS program until sometime in 2015. 79 FR 73007.

EPA regulations require obligated parties to submit compliance reports by March 31 of each year for the previous annual compliance period, and submit attest engagements with respect to these compliance reports by June 1 of each year. 40 CFR 80.1451(a) and 80.1464(d). EPA interprets these reporting and attest engagement deadlines at 40 CFR 80.1451(a) and 80.1464(a) to be inoperative for obligated parties for the 2014 compliance year because final RFS standards for 2014 have not been established, and it is therefore impossible for obligated parties to assess their compliance with the applicable standards. Therefore, obligated parties are not required to submit compliance reports or attest engagements for the 2014 compliance year in accordance with the deadlines set forth in 40 CFR 80.1451(a) and 80.1464(d). When EPA issues a final rule establishing 2014 RFS percentage standards, we will in the same action establish a deadline for compliance demonstration reports and attest engagements for obligated parties associated with the 2014 standards.

The situation is different for exporters of renewable fuel in that it is possible for exporters to partially or fully meet the regulatory deadlines for compliance reports and attest engagements, as described in more detail below. An exporter's renewable volume obligation ("ERVO") is determined entirely by the volume and type of renewable fuel exported. Therefore, all exporters are able to comply with the requirement in 40 CFR 80.1451(a)(1)(vi) to report their ERVOs for 2014 by the March 31, 2015 annual compliance demonstration deadline.

Beginning September 17, 2014, exporters of renewable fuel must retire RINs to satisfy ERVOs within 30 days of each export. ERVOs associated with exports occurring between January 1, 2013 and September 16, 2014 must be satisfied at the time of the compliance demonstration deadline for the 2013 compliance period. 40 CFR 80.1430(g). That deadline is currently set by 40 CFR 80.1451(a)(1)(xiv) as 30 days after publication in the Federal Register of the final rule establishing the 2014 RFS percentage standards. Considering that all exporters currently know their 2014 ERVOs, and that certain 2014 ERVOs (for exports on or after September 17, 2014), must be satisfied within 30 days of export and other 2014 ERVOs (for exports prior to September 17, 2014) need only be satisfied at the time of the compliance demonstration for the 2013 compliance period (which is 30 days after publication of the final 2014 rule), EPA interprets the March 31, 2015 deadline in 40 CFR 80.1451(a) for 2014 annual

compliance demonstration reports for exporters, and the associated deadline for attest engagements for such reports, as follows.

All exporters of renewable fuel in 2014 must submit annual compliance reports by the March 31, 2015 deadline that includes at a minimum the information specified in 40 CFR 80.1451(a)(1)(i)(exporter's name), (ii)(EPA company registration number), and (vi)(the exporter renewable volume obligation for all of calendar 2014). All exporters may elect to fully comply with the annual reporting requirement in 40 CFR 80.1451(a)(1).

In addition, those parties that exported renewable fuel on or after September 17, 2014 must include information pursuant to 80.1451(a)(1)(viii) regarding RINs retired to satisfy such ERVOs, and (x) regarding cellulosic biofuel waiver credits used, if applicable.

For all exporters not submitting complete annual compliance reports by March 31, 2015, (e.g., those exporters that have not elected to fully report RINs retired to meet their full calendar year ERVOs), supplemental annual compliance reports are due 30 days after EPA issues a final 2014 rule, unless EPA modifies this deadline through rulemaking.

Attest engagements with respect to the partial or complete annual compliance reports submitted by March 31, 2015 are due on June 1, 2015, in accordance with 40 CFR 80.1464(d). Attest engagements with respect to supplemental annual compliance reports are due 90 days after issuance of the 2014 final rule, consistent with the attest engagement deadline specified for the 2013 compliance year that is specified in 80.1464(g), unless this deadline is modified by EPA through rulemaking.

EPA will publish another Enviroflash if it issues rules changing the deadlines described in this Enviroflash.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JAN - 4 2018

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Re: No Action Assurance Affecting Bear Spray and Certain Other Fog-type Defense Aerosol
Spray Manufacturers

Dear Sir/Madam:

Today the EPA is providing a no action assurance (No Action Assurance) to manufacturers of bear sprays and similar fog-type defense aerosol sprays that as of January 1, 2018, are prohibited from using HFC-134a as a propellant in these sprays. This No Action Assurance is being issued in response to a December 22, 2017, request from William Wehrum, Assistant Administrator for the Office of Air and

Radiation (OAR). As explained more fully below, this No Action Assurance addresses certain provisions of the EPA's final rule, Protection of Stratospheric Ozone: Change of Listing Status for Certain Substitutes under the Significant New Alternatives Policy Program (SNAP Rule) (July 2015). Under Title VI of the Clean Air Act, the EPA's Significant New Alternatives Policy (SNAP) program evaluates the human health and environmental effects of alternatives to ozone-depleting substances and publishes a list of acceptable and unacceptable substitutes. The EPA issued a final rule on July 20, 2015, with an effective date of August 19, 2015. This rule made HFC-134a unacceptable as a propellant in consumer and law enforcement defense aerosol uses as of July 1, 2016. A later compliance date of January 1, 2018, applied to certain personal defense spray aerosol products such as those addressed by this No Action Assurance. The 2015 Final SNAP Rule made HFC-134a unacceptable as a propellant in consumer and law enforcement defense aerosol uses based on information the Agency had at the time on the availability of safer alternatives. Most, but not all, defense sprays are pepper sprays. The EPA is aware of 10 companies in the United States that manufacture bear sprays or similar fog-type aerosol defense sprays.

In September 2015, two chemical suppliers that produce HFC-134a challenged the July 2015 SNAP Rule. On August 8, 2017, in *Mexichem Fluor, et. al. v. EPA*, a two-judge majority of the U.S. Court of Appeals for the District of Columbia Circuit issued a decision to vacate the July 2015 SNAP Rule to the extent it requires manufacturers, such as those subject to the January 1, 2018, deadline, who are already using alternatives to ozone depleting substances (e.g., HFC-134a) in lieu of ozone depleting substances to switch to another substance. Industry and environmental intervenors filed petitions for rehearing by the panel and by the full court. The court is withholding its mandate pending disposition of the petitions for rehearing. If the court issues the mandate for this case, it will obviate the need for a No Action Assurance because the EPA would apply the rule's requirements consistent with the court's decision.

In addition, in July 2017, one of the manufacturers subject to the January 2018 compliance date, Safariland (supported by a number of other defense aerosol spray manufacturers), submitted a petition under 40 C.F.R. § 82.184(c)(4) requesting the EPA amend the listing decision under the SNAP Rule prohibiting the use of HFC-134a in certain products. Specifically, the petition requested that the EPA amend an "acceptable, subject to use conditions" listing for HFC-134a to add a use condition for personal defense sprays. OAR has met several times with the petitioner and has reviewed additional technical information that OAR did not have at the time it finalized the 2015 SNAP Rule. This information indicates that for defense aerosol sprays that must be discharged as a "cloud" or "fog" over a specific distance and velocity (such as bear sprays) alternative formulations are not yet available that meet the necessary performance criteria. Specifically, performance may be particularly challenging for products such as bear sprays and fog-type defense sprays that that need to efficiently and quickly release an effective amount over a wide area in a short period of time to ensure safety. Based on its review of this new information, OAR issued a letter on December 21, 2017, informing Safariland that it has "tentatively concluded that a longer transition period is needed for aerosol propellant use of HFC-134a as it pertains to bear sprays and certain other defense aerosol sprays and [is] actively assessing [its] options."

The pending litigation and Safariland petition regarding the 2015 SNAP Rule have created unusual circumstances and confusion. First, the court issued a decision to vacate the July 2015 SNAP rule, but withheld the issuance of the mandate as it considers the petitions for rehearing, and in the interim, the January 2018 compliance date for the rule has just passed. Second, in response to the Safariland petition, OAR has tentatively concluded that a longer transition period (e.g., later compliance date) is needed for aerosol propellant use of HFC-134a as it pertains to bear sprays and certain other defense aerosol sprays,

and yet the January 2018 compliance date is now in effect. Under these unusual and limited circumstances, it is appropriate to issue this No Action Assurance for a limited amount of time while the court considers the petitions for rehearing and the EPA considers next steps in response to the Safariland petition.

Specifically, this No Action Assurance establishes that the EPA will exercise its enforcement discretion not to pursue enforcement action against manufacturers of bear sprays and similar fog-type defense sprays that fail to replace HFC-134a with an alternative propellant in these products by January 1, 2018. This No Action Assurance will remain in effect until either: (1) 11:59 PM EDT, March 5, 2018; or (2) the issuance of the D.C. Circuit Court of Appeals mandate, whichever occurs earlier. If the court has not issued the mandate by March 5, 2018, the EPA will consider whether an extension of this No Action Assurance is appropriate. The EPA reserves the right to revoke or modify this No Action Assurance.

The issuance of a No Action Assurance for this period of time is in the public interest to alleviate confusion and to ensure the orderly administration of the affected rule. It will also allow the EPA to determine the appropriate next steps following its tentative conclusion that a longer transition period is appropriate for these products. Finally, the issuance of a No Action Assurance for this period of time is in the public interest to ensure the uninterrupted manufacturing of personal defense sprays such as bear sprays and other fog-type defense sprays. Due to limited duration of this action, it should have minimal environmental impact.

If you have further questions regarding this matter, please contact Apple Chapman at chapman.apple@epa.gov or (202) 564-5666.

Sincerely,


Susan Parker Bodine

cc: William Wehrum, Assistant Administrator, Office of Air and Radiation
Elizabeth Shaw, Deputy Assistant Administrator, Office of Air and Radiation
Sarah Dunham, Director, Office of Atmospheric Programs
Cynthia Newberg, Director, Stratospheric Protection Division

July 10, 2018

Andrew K. Wheeler
Acting Administrator, United States
Environmental Protection Agency
Office of the Administrator Code 1101A
1200 Pennsylvania Ave NW
Washington, D.C. 20460

RE: Request For Immediate Withdrawal Or Administrative Stay Of Unlawful Decision To Cease Enforcement Of Regulatory Limits On Pollution From Super-Polluting “Glider” Diesel Freight Trucks

Dear Acting Administrator Wheeler:

The Environmental Defense Fund, Center for Biological Diversity, and Sierra Club respectfully request that you immediately withdraw or stay EPA’s attached decision to **cease enforcing** certain air-pollutant-emission limits that the Clean Air Act and EPA’s own duly promulgated regulations impose on heavy-duty “glider” diesel freight trucks.¹ This blatant and “extreme ... abdication of [your agency’s] statutory responsibilities” is not only illegal,² it is extraordinarily harmful to public health (as EPA’s own data show) and to the vast majority of truck manufacturers, who must comply with the emission limitations that the agency is unlawfully not enforcing for their competitors.

As you know, a “glider” is a heavy-duty diesel truck assembled by installing a used engine and powertrain in a new truck body, known as a “glider kit.” But even the “used” engine is a freshly-remanufactured part. Prior to assembly, a glider engine is wholly rebuilt to “significantly increase [its] service life.”³ Unsurprisingly, then, gliders are “marketed and sold as ‘brand new’ trucks” and compete in the same market as heavy-duty trucks with brand-new parts.⁴ Finally, and most importantly for present purposes, gliders are “new motor vehicles,” as that term is defined in the Clean Air Act.⁵ This means that a newly manufactured glider is properly subject to the same air-pollution regulations as any other heavy-duty truck that enters the American marketplace.

Gliders must meet modern emission standards for new heavy-duty trucks in order to safeguard public health. Left unregulated, a glider engine emits orders of magnitude more harmful pollution than a heavy-duty truck engine designed to comply with those standards.⁶ EPA’s own estimates from 2016 indicate that, as compared to a world where all new heavy-duty trucks meet the standards that apply to other new heavy-duty trucks, every model year of glider production at

¹ See 5 U.S.C. § 705.

² *Heckler v. Chaney*, 470 U.S. 821, 833 n.4 (1985).

³ 40 C.F.R. § 1068.120(b). See also EPA, *Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles—Phase 2*, 81 Fed. Reg. 73478, 73518 n.93 (Oct. 25, 2016) (Phase 2 Rule) (“[A]ll of the donor engines installed in glider vehicles are rebuilt.”).

⁴ Phase 2 Rule, 81 Fed. Reg. at 73514.

⁵ 42 U.S.C. § 7550(3).

⁶ Phase 2 Rule, 81 Fed. Reg. at 73943.

then-current production rates would increase pollution of nitrogen oxides (NO_x) and fine particulate matter (PM_{2.5}) by 415,000 tons and 6,800 tons, respectively.⁷ Those are *huge* numbers, and EPA concluded that if production continued on pace, glider vehicles would account for about one third of total NO_x and PM emissions from the heavy duty truck sector by 2025, even though gliders would constitute only 5% of heavy-duty trucks on the road.⁸ And those pollution estimates are almost certainly too low, as indicated by more recent tests of glider vehicles conducted by EPA in 2017.⁹ Even using the agency’s conservative 2016 estimates, every year of unregulated glider production can be expected to cause 700 to 1600 premature deaths from PM_{2.5} pollution alone, not to mention cancers, respiratory ailments, and other serious health problems, through the life of those vehicles.¹⁰ It is virtually impossible to avoid those consequences once heavy-duty glider trucks are sold because the Act regulates vehicles almost exclusively at the point of manufacture. Even a brief period of unregulated glider production, then, will have substantial and irreparable consequences. To put it bluntly but accurately: EPA’s avowed decision to stop enforcing these critical air-pollution protections will kill and sicken Americans on a large scale.

Importantly, EPA’s *existing* regulations already allow each small manufacturer to produce 300 heavy-duty glider vehicles per year that are exempt from current pollution control requirements applicable to all other newly sold heavy-duty trucks (in addition to allowing unlimited production of glider vehicles that *do* satisfy those requirements), in order to accommodate the historical but extremely limited role of gliders as a means to salvage engines from wrecked vehicles.¹¹ These regulations were validly promulgated and never challenged in court by any glider manufacturer.

This state of affairs was apparently unsatisfactory to ex-Administrator E. Scott Pruitt, who proposed last November to reinterpret the statutory term “new motor vehicle” to exclude gliders completely—ignoring the plain language of the Clean Air Act, and conceding that its legislative history lacks evidence to support the proposal, but basing his proposal on a *possible* construction of an entirely different law enacted for an entirely different purpose.¹² The agency appears to have realized that its proposal was irredeemably flawed after receiving comments of the undersigned organizations and a host of other entities, including States, NGOs, modern engine manufacturers, and trucking-industry stakeholders, who saw the proposed rule for what it was: an illegal effort to codify a competitive advantage for a small cadre of favored manufacturers to the detriment of literally everyone else. The agency’s ill-advised proposal did not hold up for other reasons as well, most notably a public renunciation of the sole “study” on which EPA had rested its tentative but still indefensible suggestion that heavy-duty glider trucks might not

⁷ See *ibid.*; EPA & NHTSA, *Response to Comments for Joint Rulemaking, Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles – Phase 2*, at 1965 (Aug. 2016) (“Response to Comments”).

⁸ See Phase 2 Rule, *supra* n.6.

⁹ EPA, “Chassis Dynamometer Testing of Two Recent Model Year Heavy-Duty On-Highway Diesel Glider Vehicles,” Nov. 20, 2017, Docket No. EPA-HQ-OAR-2014-0827-2417.

¹⁰ Response to Comments at 1881; see also Phase 2 Rule at 73836, 73943.

¹¹ 40 C.F.R. § 1037.105(t)(1)(ii). This exemption expires in 2021, *ibid.*, but EPA also created permanent exemptions for gliders with engines that are less traveled or more modern. See *id.* §§ 1037.150(t)(2)(vii)(2) and 1037.635(c)(1).

¹² EPA, *Repeal of Emission Requirements for Glider Vehicles, Glider Engines, and Glider Kits*, 82 Fed. Reg. 53442, 53444–46 (Nov. 16, 2017) (“Proposed Repeal”).

actually pollute more than heavy-duty trucks powered by modern engines with the latest emission-control technologies.¹³ If that were so, of course, there would be no need for the agency to revisit its glider-specific regulations because heavy-duty glider trucks could simply comply with the standards applicable to all other heavy-duty trucks.

EPA initially seemed in a rush to finalize the proposed rule, denying requests for an extension of the comment period that were filed by EDF and other interested parties concerned about the lack of information disclosed by the agency and its untenable legal, scientific and factual conclusions. But once the comment period closed, the proposal sat for six months with no action by EPA.

Until last Friday, the effective date of Mr. Pruitt’s resignation as Administrator. Late that night, without meeting even the barest standard of transparency, EPA announced that it was “exercising its enforcement discretion in 2018 and 2019,”¹⁴ and inviting companies to violate the annual cap of 300 exempted gliders per year per manufacturer during that period while the agency attempts to develop a defensible rationale for lifting that cap.

The following Monday, on the first day of your tenure as Acting Administrator, EPA published to its website a letter memorializing the blanket nonenforcement decision previously announced. That letter, attached here for your reference, is styled a “Conditional No Action Assurance,” but there is nothing “conditional” about it. Assistant Administrator Susan Parker Bodine states in no uncertain terms that “I am today providing a ‘no action assurance’” to all “Small Manufacturers” of heavy-duty glider trucks and all “Suppliers” of heavy-duty glider kits.¹⁵ The letter provides that its “no action assurance will remain in effect” for a full calendar year (and apply to two full years of unlawful glider production), unless EPA finalizes a “rule extending the compliance date applicable to small manufacturers of glider vehicles.”¹⁶

By way of explanation, EPA states only that it has “determined that additional evaluation of several [unnamed] matters is required before it can take final action on the” rule it proposed eight months ago. The letter also alludes to unnamed glider manufacturers who allegedly “reli[ed] on” the agency’s proposed rule—instead of relying on EPA’s actual standards on the books—that “have reached the[]” 2018 annual limit of 300 super-polluting glider trucks and now wish to violate existing law by producing more. The letter states that EPA is “exercis[ing] its enforcement discretion with respect to the applicability of 40 C.F.R. § 1037.635” for all affected manufacturers and suppliers, inviting them to engage in the illegal production of glider vehicles up to the “highest annual production of glider kits and glider vehicles for any year from 2010 to

¹³ See Letter of Philip B. Oldham, President, Tennessee Tech University, to E. Scott Pruitt (Feb. 19, 2018), at <https://www.edf.org/sites/default/files/content/EDF%20Second%20Supplemental%20Comment%20re%20TTU%20Study%202.27.18%20Final2.pdf> (explaining that “knowledgeable experts within the University have questioned the methodology and accuracy of the report,” and that TTU is “investigating an allegation of research misconduct related to the study”); Proposed Repeal, 82 Fed. Reg. at 53444.

¹⁴ See Eric Lipton, *On Last Day for its Chief, E.P.A. Grants a Loophole*, New York Times, July 7, 2018, page A12 (quoting EPA Press Secretary Molly Block).

¹⁵ Environmental Protection Agency, *Conditional No Action Assurance Regarding Small Manufacturers of Glider Vehicles* (July 6, 2018), available at <https://www.epa.gov/enforcement/conditional-no-action-assurance-regarding-small-manufacturers-glider-vehicles>. (emphasis added).

¹⁶ *Id.* (emphasis added).

2014.” The result of this action will be an enormous increase in harmful pollution from what is permitted under the current regulations.¹⁷

One struggles to imagine a more blatant flouting of the rule of law. Finding itself unable to justify a change to a validly promulgated regulation, EPA has announced that it will not enforce that regulation for at least a year (and with respect to two full vehicle model years), by which time EPA hopes to have divined a reason to make the change. In effect, EPA has substituted a sweeping, general non-enforcement decision for what otherwise would have been a deeply flawed final rule. The agency’s decision not to enforce an entire regulation, full stop, “represents [its] final ... position on this issue, has the status of law, and has an immediate and direct effect” on glider manufacturers and suppliers, their industry competitors, and (most importantly) the public at large.¹⁸ The agency has offered essentially no explanation, let alone a “reasoned” one, for its decision to ignore existing law.¹⁹

It is telling that this indefensible decision to stop enforcing this vital regulation took place under cloak of administrative darkness, during the final night of Mr. Pruitt’s tenure. This decision mocks basic norms of transparency and accountability, as well as the rule of law, and it severely and needlessly harms the public that EPA is entrusted to serve.²⁰

The agency’s definitive refusal to enforce vital health protections is flagrantly unlawful and must be reversed. At a minimum, to prevent irreparable harm to our members and to the public at large, and pursuant to Federal Rule of Appellate Procedure 18(a)(1), the undersigned request that you issue a stay of this unlawful and injurious decision immediately.

Respectfully submitted,

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¹⁷ 40 C.F.R. § 1037.150(t)(3).

¹⁸ *Clean Air Council v. Pruitt*, 862 F.3d 1, 6 (D.C. Cir. 2017) (quoting *Int’l Union, United Mine Workers of America v. Mine Safety & Health Admin.*, 823 F.2d 608, 615 (D.C. Cir. 1987)).

¹⁹ *Encino Motorcars, LLC v. Navarro*, 136 S. Ct. 2117, 2125 (2016).

²⁰ *See, e.g.*, 42 U.S.C. § 7401(b)(1).

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**IN THE UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT**

ENVIRONMENTAL DEFENSE FUND, CENTER FOR
BIOLOGICAL DIVERSITY, and SIERRA CLUB,

Petitioners,

v.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY,

Respondent.

**EMERGENCY MOTION FOR STAY OR SUMMARY DISPOSITION
AND REQUEST FOR ADMINISTRATIVE STAY**

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CERTIFICATE AS TO PARTIES, RULING, AND RELATED CASES

Pursuant to Circuit Rule 28(a)(1), petitioners certify as follows:

A. Parties and Amici

Petitioners are the Environmental Defense Fund, Center for Biological Diversity, and Sierra Club. Respondent is the United States Environmental Protection Agency (EPA). No parties have moved for leave to intervene at present. There are no *amici curiae* at present.

B. Ruling Under Review

Petitioners seek review of a final action taken by EPA on July 6, 2018, styled as a “Conditional No Action Assurance Regarding Small Manufacturers of Glider Vehicles,” and reproduced in an Addendum to this motion.

C. Related Cases

Petitioners are not aware of any related cases within the meaning of Circuit Rule 28(a)(1)(C).

/s/ Matthew Littleton
Matthew Littleton

CIRCUIT RULE 26.1 DISCLOSURE STATEMENT

Pursuant to Federal Rule of Appellate Procedure 26.1 and Circuit Rule 26.1, Petitioners Environmental Defense Fund, Center for Biological Diversity, and Sierra Club make the following disclosures:

Environmental Defense Fund

Parent Corporations: None.

Publicly Held Company that Owns 10% or More of Party's Stock: None.

Party's General Nature and Purpose: Environmental Defense Fund, a corporation organized and existing under the laws of the State of New York, is a national non-profit organization that links science, economics, and law to create innovative, equitable, and cost-effective solutions to society's most urgent environmental problems.

Center for Biological Diversity

Parent Corporations: None.

Publicly Held Company that Owns 10% or More of Party's Stock: None.

Party's General Nature and Purpose: The Center for Biological Diversity is a non-profit corporation organized and existing under the laws of the State of California that works through science, law, and advocacy to secure a future for all species, great and small, hovering on the brink of extinction, with a focus on protecting the lands, waters, and climate that species need to survive.

Sierra Club

Parent Corporations: None.

Publicly Held Company that Owns 10% or More of Party's Stock: None.

Party's General Nature and Purpose: Sierra Club, a corporation organized and existing under the laws of the State of California, is a national non-profit organization dedicated to the protection and enjoyment of the environment.

/s/ Matthew Littleton
Matthew Littleton

CERTIFICATE OF COMPLIANCE WITH CIRCUIT RULE 18(a)(1)

The undersigned certifies that this Emergency Motion for Stay or Summary Disposition and Request for Administrative Stay complies with Circuit Rule 18(a).

Movants previously requested relief from respondent U.S. Environmental Protection Agency (EPA). The final action under review is dated July 6, 2018, but EPA did not release it until July 9, 2018. Movants sent a certified letter and e-mail to the Acting Administrator and other agency officials on July 10, 2018. *See* Appendix 253–57. Movants’ letter objected to the challenged action and requested that it be immediately withdrawn or stayed. After receiving no response from EPA or its Acting Administrator, movants filed this petition for review and motion for emergency relief on July 17, 2018.

On July 16, 2018, the undersigned provided notice of this filing by e-mail to Eric Hostetler, Environmental Defense Section, Environment and Natural Resources Division, United States Department of Justice.

/s/ Matthew Littleton
Matthew Littleton

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GLOSSARY

EPA	United States Environmental Protection Agency
NO _x	Nitrogen oxides
PM _{2.5}	Fine particulate matter

INTRODUCTION

Petitioners challenge a final decision by the Environmental Protection Agency (EPA) that encourages the production and sale of thousands of super-polluting, heavy-duty diesel freight trucks in violation of the agency's own Clean Air Act regulations. EPA's decision not to enforce those regulations nationwide paves the way for immediate production and sale of these "gliders," which will operate for decades and emit orders of magnitude more pollutants than trucks compliant with current pollution-control standards. The agency's refusal to implement its own regulations will result in premature mortality on a massive scale, and it threatens to undermine decades of progress in combating diesel-exhaust pollution. Hastily requested and finalized on the last night of then-Administrator E. Scott Pruitt's tenure without any input from the public, this extraordinary decision rewards a handful of manufacturers that lobbied him for a Clean Air Act loophole at the expense of the health and welfare of the American people, not to mention competing firms who follow the law.

EPA anticipates that, each day that this decision remains in effect, glider manufacturers will produce and sell more noncompliant freight trucks in contravention of existing law and in derogation of human health. Because the Clean Air Act regulates vehicles principally at the point of manufacture, it will be virtually impossible to claw them back once they are sold. These super-polluters thus are poised to spend their lifetimes emitting many times more smog-forming nitrogen oxides (NO_x),

lung-damaging particulate matter (PM_{2.5}), and cancer-causing toxics than lawfully built heavy-duty trucks. Relief is urgently needed from EPA's unlawful action in order to avert substantial and irreparable public-health consequences.

The goal and anticipated effect of EPA's decision is that glider companies will illegally manufacture and sell noncompliant vehicles without the agency needing to meet Congress's detailed requirements for staying or revising the Clean Air Act regulations meant to keep those vehicles off the road. Although EPA labeled its action a "decision not to enforce" the Act and its implementing regulations, this nationwide action is nothing like the sort of case-by-case enforcement decisions for which agencies are granted considerable discretion. Instead, EPA's decision sets up a shadow regulatory regime that prescribes standards and timelines for what every manufacturer nationwide may do without fear of federal enforcement, separate and apart from what the law requires. This is a transparent effort by EPA to evade clear statutory restraints on its authority to suspend or revise regulations.

EPA's action is also arbitrary and capricious on its own terms. The agency failed even to acknowledge its earlier factual finding—memorialized in a final regulation—that allowing these vast numbers of super-polluting trucks to be produced and sold will endanger human health and welfare. Nor could EPA justify its action based on any finding that those harms are now outweighed by its desire to grant favors to glider companies. A decision by this Court permitting this gambit to stand

would open the door for every federal agency simply to ignore whichever laws do not conform to its current policy preferences.

This Court should either summarily declare EPA's decision unlawful and vacate it, or else stay its effect pending review on the merits. Furthermore, because the harm is so severe and the timing so urgent, and because EPA's open and notorious abdication of its enforcement responsibility is so corrosive to the rule of law, petitioners respectfully request that this Court administratively stay the decision while it considers this motion.

BACKGROUND

A "glider" is a heavy-duty diesel freight truck that combines a brand-new truck body (a "glider kit") with a previously used engine and transmission. Gliders "are typically marketed and sold as 'brand new' trucks, Appendix (A) at 332, and for good reason. Before assembling a glider, the manufacturer rebuilds the engine to "significantly increase [its] service life," 40 C.F.R. 1068.120(b); A205-06, so that the glider may compete in the marketplace with other heavy-duty diesel freight trucks assembled solely from brand-new parts. *See* A147-49. But there is a significant difference between gliders and the other new trucks with which they compete: Glider trucks emit far more diesel pollution thanks to their failure to incorporate pollution controls.

Air pollution from gliders garnered little attention before the twenty-first century, for two reasons. First, gliders historically were manufactured only in very small numbers as a means to salvage usable engines from wrecked trucks. Second, differences in emissions between late-model engines and the earlier models installed in gliders tended to be modest. *See* A208–09.

That changed in recent decades, when air-pollution concerns and major advances in emissions-control technology prompted EPA to tighten standards and require that new heavy-duty diesel engines reduce NO_x and PM_{2.5} emissions by 95 percent and 90 percent, respectively, over earlier models. A209–12, 226. Glider manufacturing went from being an isolated way to salvage usable engines from wrecked trucks to (for some) a business model predicated on circumventing the new emissions standards. Glider sales increased by at least an order of magnitude beginning in 2004. A119, 607. While still accounting for a relatively small portion (roughly 5 percent) of the overall freight-truck market in terms of sales volume, gliders accounted for half of NO_x and PM_{2.5} emissions from *new* heavy-duty freight trucks, and if trends continued, were expected to account for one-third of such emissions from *all* heavy-duty freight trucks by 2025. A406. Untreated diesel exhaust from gliders had become a major public-health problem, especially in the Nation’s “truck bottlenecks” where traffic congestion is worst. *See* A198.

EPA responded to that problem in 2016 with a rule clarifying that new glider vehicles are subject to the same emission standards as comparable “new motor vehicles” that are entering the domestic consumer market for the first time. 42 U.S.C. 7521(a)(1). *See* 40 C.F.R. 1037.635(a) (2017). The agency explained in the 2016 Rule that “it is both consistent with the plain language of the [Clean Air Act] and reasonable and equitable for the engines in ‘new trucks’ to meet the emission standards for all other engines installed in new trucks.” A336.

At the same time, EPA acknowledged the historical role of gliders as a means to recover usable engines from a small number of wrecked trucks. The 2016 Rule granted transitional exemptions for manufacturers with fewer than 1,500 employees who “sold one or more glider vehicles in 2014.” 40 C.F.R. 1037.150(t)(1)(i). *See also* 13 C.F.R. 121.201. For calendar year 2017, the 2016 Rule allowed those manufacturers to produce noncompliant glider vehicles up to their “highest annual production of glider kits and glider vehicles for any year from 2010 to 2014.” 40 C.F.R. 1037.150(t)(3). For calendar years 2018–21, the same restriction applies for manufacturers that did not produce more than 300 glider kits or vehicles in any year from 2010 to 2014; but, for manufacturers that produced more than 300 glider kits or vehicles during one of those years, the 2016 Rule caps production of noncompliant gliders at 300 per year. 40 C.F.R. 1037.150(t)(1)(ii). Both during and after this

transition period, glider manufacturers may produce an unlimited number of vehicles that are compliant with current emission standards.

Glider manufacturers did not challenge the 2016 Rule in court. But the Nation's largest glider manufacturer and dealer, Fitzgerald Glider Kits (Fitzgerald), met directly with Administrator Pruitt in May 2017. A75. Two months later, Fitzgerald and two other glider companies petitioned him to repeal the provisions of the 2016 Rule that apply to glider vehicles and kits. A60–66. The petition relied heavily on a finding of a “study recently conducted by Tennessee Tech[nological University]” that emissions of NO_x and PM_{2.5} from rebuilt glider engines were no higher than comparable emissions from newly built engines. A64. *See also* A68–71. Administrator Pruitt promptly granted the petition and began a rulemaking to examine “the EPA’s authority under the Clean Air Act to regulate gliders” and “the soundness of the EPA’s [2016] technical analysis” that had unambiguously identified much higher NO_x and PM_{2.5} emissions from old glider engines. A58.

In November 2017, Administrator Pruitt published in the Federal Register a proposed repeal of “emission standards and other requirements for heavy-duty glider vehicles, glider engines, and glider kits.” A49. The basis for the proposed repeal was his “proposed [re]interpretation” of the Clean Air Act to exclude all newly assembled gliders from regulation as new motor vehicles. A50. *See* 42 U.S.C. 7521(a)(1). Administrator Pruitt admitted that a glider meets the literal terms of the statutory

definition of a “new motor vehicle”: one whose “equitable or legal title ... has never been transferred to an ultimate purchaser.” 42 U.S.C. 7550(3). *See* A51. But he nonetheless proposed special treatment for gliders because, in his view, Congress did not have the “specific intent to include within the statutory definition such a thing as a glider vehicle.” A52. The proposed rule relied primarily on the Automobile Information Disclosure Act, 15 U.S.C. 1231 *et seq.*, an “otherwise unrelated” statute not mentioned in the Clean Air Act or its legislative history. A52. EPA speculated that Congress must have been thinking about a possible reading of the Automobile Information Disclosure Act when it defined the term “new motor vehicle” in the Clean Air Act. A52–53

The proposed rule also referenced the emissions study cited in the glider companies’ petition. A54. The proposal did not disclose, however, that EPA had already unearthed methodological concerns with that study. A299–302. After the comment period closed, it also came to light that Fitzgerald had funded the Tennessee Tech study, hosted the study at one of its facilities, and then bankrolled a new research institute for the university. A284, 300. Concerns about the lack of integrity of the study led Tennessee Tech’s President to ask the Administrator not to “use or reference” it for any purpose until the study had been peer reviewed and the university had conducted an investigation of “research misconduct.” A15. That investigation remains ongoing.

Administrator Pruitt initially appeared in a rush to finalize his proposed rule, denying multiple requests for extensions of the comment period. A17, 19. But, after the comment period closed in January 2018, EPA did not finalize the rule or update the public on its status for six months. Meanwhile, in May 2018, the agency's Science Advisory Board voted to review the proposed rule based on "'uncertainty about what scientific work, if any, would support' this action." A10.

In the face of these serious concerns, EPA did not finalize its proposed rule or any variant of it. Instead, without advance notice to the public, and on the final day of Administrator Pruitt's tenure at the agency (July 6, 2018), an urgent memorandum issued from the Assistant Administrator of the Office of Air and Radiation, William J. Wehrum, to his counterpart in the Office of Enforcement and Compliance Assurance, Susan Parker Bodine. A5–6.

Mr. Wehrum's memorandum requested that, "as a bridge to a rulemaking" that "will require more time than [EPA] previously anticipated," and "in order to preserve the status quo as it was" before the 2018 cap on glider production took effect, the Enforcement Office issue a "No Action Assurance" committing EPA not to "take enforcement action" against any manufacturer or supplier that "in 2018 or 2019" produces noncompliant gliders and kits "up to the level of their" more lenient 2017 cap. A5–6. Mr. Wehrum indicated that glider manufacturers that had "reli[ed] on" EPA's proposed rule—rather than existing law—had "reached their calendar

year 2018” limit of 300 noncompliant gliders and now would have to “cease production for the remainder of 2018” absent EPA intervention. A6. Because the agency had been unable “to ensure that whatever final action it may take conforms with the Clean Air Act and is based on reasoned decision making,” Mr. Wehrum requested that EPA refrain entirely from enforcing the current limits on production of noncompliant gliders “for one year ... or until such time as EPA takes final action to extend the compliance date” for such limits. A6.

Ms. Bodine responded that same day—again, Administrator Pruitt’s last at the agency—by “providing a ‘no action assurance’” (Glider Decision) to all glider manufacturers and their suppliers across the country, effective immediately. A2. Ms. Bodine committed EPA to refrain from enforcing the calendar year 2018 and 2019 cap of 300 noncompliant glider vehicles per manufacturer, “[c]onsistent with the intent and purpose of [Mr. Wehrum’s] planned course of action” to extend the date for compliance with the cap via rulemaking. A3. Ms. Bodine anticipated that this blanket no-action assurance would “avoid profound disruption” to glider manufacturers and suppliers by permitting them to violate existing law without fear of triggering EPA enforcement action. A3. Ms. Bodine stated summarily that her action was “in the public interest,” A3, without mentioning the quantities of dangerous pollution that thousands more noncompliant gliders would produce, and without

addressing any interest other than that of glider manufacturers and suppliers that are barred by current law from producing more than 300 noncompliant gliders per year.

Although the memos of Mr. Wehrum and Ms. Bodine were both signed on July 6, 2018, they were not released until July 9, 2018. On July 10, 2018, petitioners asked Acting Administrator Andrew Wheeler to rescind the memos or stay their effect to allow for orderly judicial review. A253–57. Mr. Wheeler did not respond to that request or a like request filed by thirteen States on July 13, 2018. A259–64. This petition followed.

JURISDICTION AND REVIEWABILITY

This Court has exclusive jurisdiction to review a “nationally applicable ... final action taken” by EPA pursuant to the Clean Air Act. 42 U.S.C. 7607(b)(1). The Glider Decision is subject to review under that provision because it is nationally applicable; it is final action; and it is not committed to agency discretion by law.

First, the Glider Decision is nationally applicable. It unambiguously governs every small manufacturer of glider freight trucks and their suppliers.¹ See A2.

Second, the Glider Decision is final action. It both “consummat[es]” EPA’s decisionmaking process and “determine[s]” “rights or obligations.” *Bennett v. Spear*, 520 U.S. 154, 178 (1997). See also *Whitman v. Am. Trucking Ass’ns, Inc.*, 531 U.S.

¹ “[A] clear majority of the companies assembling glider vehicles” qualify as “small manufacturers.” A685.

457, 478 (2001). The decision plainly states that, effective immediately, EPA “will” not enforce the regulation prohibiting production of more than 300 noncompliant glider vehicles per manufacturer per year. A3. *See* 40 C.F.R. 1037.150(t)(1)(ii); *Cnty. Nutrition Inst. v. Young*, 818 F.2d 943, 946 (D.C. Cir. 1987) (“[U]se of ‘will’ indicates [a] statement is in fact a binding norm.”). The Glider Decision *obligates* EPA to withhold its authority to enforce the law—and, conversely, it grants glider manufacturers and their suppliers the *right* to violate existing law without triggering EPA “[a]ctions to restrain such violations.” 42 U.S.C. 7523(b).

EPA’s boilerplate about “reserv[ing] its right to revoke or modify” the Glider Decision does not render the decision nonfinal. A3. *See Sackett v. EPA*, 566 U.S. 120, 127 (2012) (“The mere possibility that an agency might reconsider ... does not suffice to make an otherwise final agency action nonfinal.”). Nor is the decision made nonfinal by EPA’s ongoing and elongated reconsideration of the regulation that it refuses to enforce. *See Clean Air Council v. Pruitt*, 862 F.3d 1, 7 (D.C. Cir. 2017) (“[T]he applicable test [for finality] is not whether there are further administrative proceedings available, but rather whether the impact of the order is sufficiently final to warrant review in the context of the particular case.”).

Third, the Glider Decision is not “immune from judicial review” simply because EPA styled it a “decision not to take enforcement action.” *Heckler v. Chaney*, 470 U.S. 821, 832 (1985). The Glider Decision is not “a ‘single-shot nonenforcement

decision.” *OSG Bulk Ships, Inc. v. United States*, 132 F.3d 808, 812 (D.C. Cir. 1998) (citation omitted). EPA here “consciously and expressly adopted a general policy’ that is so extreme as to amount to an abdication of its statutory responsibilit[y]” to uphold and implement a validly issued regulation. *Heckler*, 470 U.S. at 833 n.4. *See id.* at 839 (Brennan, J., concurring) (noting the importance of judicial review of an agency’s “refus[al] to enforce a regulation lawfully promulgated and still in effect”). The Glider Decision expressly “delineat[es] the boundary between enforcement and non-enforcement and purport[s] to speak to a broad class of parties.” *Crowley Caribbean Transp., Inc. v. Peña*, 37 F.3d 671, 677 (D.C. Cir. 1994). *See also OSG Bulk Ships*, 132 F.3d at 812 (“[A]n agency’s adoption of a general enforcement policy is subject to review.”). And the document announcing the decision “present[s] a clear[] (and ... easily reviewable) statement of [EPA’s] reasons” for its action. *Crowley*, 37 F.3d at 677. Those reasons are plainly invalid, as we now explain.

ARGUMENT

The Glider Decision is an unlawful attempt by EPA to circumvent the Clean Air Act’s requirements and institute a shadow regulatory regime under the guise of exercising “enforcement discretion.” A stay of the decision pending review is warranted because it is patently illegal; the irreparable harm to petitioners’ members is certain and great; and the decision rewards only manufacturers that violate the law, at the expense of both public health and competitors that follow the law. Indeed, this

Court should summarily vacate the decision because its flaws are “so clear as to justify expedited action.” *Walker v. Washington*, 627 F.2d 541, 545 (D.C. Cir. 1980).

I. The Glider Decision should be declared unlawful and vacated.

Petitioners should prevail on the merits of their claims that the Glider Decision is unlawful. First, the decision circumvents Congress’s procedural and substantive directions in the Clean Air Act. Second, the decision is arbitrary and capricious on its own terms because it entirely ignores the rationale for the regulation it is designed to undercut.

A. The Glider Decision is an illegal effort to subvert the Clean Air Act.

“EPA is a federal agency—a creature of statute.” *Michigan v. EPA*, 268 F.3d 1075, 1081 (D.C. Cir. 2001). And “Congress does not intend administrative agencies, agents of [its] own creation, to ignore clear ... regulatory, [or] statutory ... commands.” *Heckler*, 470 U.S. at 839 (Brennan, J., concurring). “So long as [a] regulation remains in force the Executive Branch is bound by it, and indeed the United States as the sovereign composed of the three branches is bound to respect and enforce it.” *United States v. Nixon*, 418 U.S. 683, 696 (1974). *See also Nat’l Family Planning & Reproductive Health Ass’n v. Sullivan*, 979 F.2d 227, 234 (D.C. Cir. 1992) (“[A]n agency issuing a legislative rule is itself bound by the rule until that rule is amended or revoked.”). The grant of enforcement discretion in the Clean Air Act, *see* 42 U.S.C. 7523 and 7524(b), does not “set [EPA] free to disregard

legislative direction in the statutory scheme that the agency administers.” *Heckler*, 470 U.S. at 833. EPA’s Glider Decision is unlawful because it ignores Congress’s straightforward directives in the Clean Air Act.

The Glider Decision disregards the instruction that EPA “enforce a lawfully issued final rule ... while it reconsiders [that rule],” *Clean Air Council*, 862 F.3d at 9, except in “carefully defined” circumstances not present here. *Nat. Res. Def. Council, Inc. v. Reilly*, 976 F.2d 36, 40 (D.C. Cir. 1992). Congress understood that EPA, like any agency, “must consider ... the wisdom of its policy on a continuing basis, for example, in response to changed factual circumstances, or a change in administrations.” *Nat’l Cable & Telecomms. Ass’n v. Brand X Internet Servs.*, 545 U.S. 967, 981 (2005) (citation omitted). The Clean Air Act thus authorizes EPA to “revis[e]” its “regulations under section 7521” of Title 42 that set air-pollutant-emission standards for motor vehicles. 42 U.S.C. 7607(d)(1)(K). At the same time, however, Congress determined that “the effectiveness of” the existing regulation “shall not [be] postpone[d]” while the process of regulatory revision unfolds. 42 U.S.C. 7607(b)(1). *Accord* 42 U.S.C. 7607(d)(7)(B) (providing that a pending “proceeding for reconsideration of the rule ... shall not postpone [its] effectiveness”).

The purpose and intended effect of the Glider Decision is to blunt the effectiveness of the mandatory production limit of 300 noncompliant glider vehicles per manufacturer per year by inviting manufacturers to disregard it while EPA takes

“more time” to finalize a relaxation or elimination of that limit. A3. Or, as Mr. Wehrum artfully put it, the Glider Decision aims to “preserve the status quo *as it was*” in 2017, before manufacturers had to adhere to the *current* production limit, “until such time as [EPA finds itself] able to complete final action” delaying that limit. A6 (emphasis added). EPA candidly admits that it issued the Glider Decision for one reason only: To upend the status quo *as it is* by allowing glider manufacturers and suppliers to violate an existing regulation while EPA spends another year developing a new one. The decision anticipates that its own existence will mean that manufacturers that “have reached their calendar year 2018” production limit will not “cease production,” as existing law requires, but instead will produce vehicles in violation of that limit “while EPA completes its reconsideration.” A3. This gross abuse of enforcement discretion frustrates Congress’s clear intent that Clean Air Act regulations remain “effective[.]” pending their reconsideration by EPA. 42 U.S.C. 7607(b)(1).

The Glider Decision does not resemble in the least an exercise of case-by-case enforcement discretion. First, it was initiated by the office of EPA charged with promulgating legislative rules, not the enforcement office. Second, case-by-case enforcement decisions implicate questions like “whether a violation has occurred, ... whether agency resources are best spent on this violation or another, whether the agency is likely to succeed if it acts, whether the particular enforcement action ...

best fits the agency’s overall policies, and, indeed, whether the agency has enough resources to undertake the action at all.” *Heckler*, 470 U.S. at 831. None of those factors are mentioned in the Glider Decision, which was issued by the enforcement office on the same day the request was made, hardly enough time for a careful exercise of prosecutorial discretion. The decision has more of the hallmarks of an interim final rule—or, as EPA actually described it, “a bridge to a rulemaking,” A5—instituted without requisite procedure or reasoned decisionmaking.

The Clean Air Act includes detailed prescriptions of the procedures EPA must follow in order to amend an agency rule. 42 U.S.C. 7607(d)(2)-(6). Any rulemaking to revise the existing production limit would, as the agency concedes, have to “conform[] with the Clean Air Act and [be] based on reasoned decision making.” A6. The Glider Decision is EPA’s attempt to blow past these requirements and promote the favored regime of a new Administration before conforming with the Clean Air Act and articulating a reasoned basis for decision. *Cf.* A270–71 (reciting longstanding EPA “policy against definitive no action promises” made “on the basis that revisions to the underlying legal requirement are being considered”).

The Glider Decision lays out an alternative regulatory structure in detail: “[M]anufacturers to which 40 C.F.R. § 1037.150(t) applies that either are manufacturing or have manufactured glider vehicles in calendar year 2018” and “those companies to which 40 C.F.R. § 1037.150(t)(1)(vii) applies that sell glider kits to” those

manufacturers may now “in 2018 and 2019 produce for each of those two years up to the level of their Interim Allowance as was available to them in calendar year 2017 under 40 C.F.R. § 1037.150(t)(3).” A2–3. And it covers a specific time period, “remain[ing] in effect until the earlier of: (1) 11:59 p.m. (EDT), July 6, 2019; or (2) the effective date of a final rule extending the compliance date.” A3. But EPA means to “extend the compliance date” immediately, without following the procedures that Congress commanded it to follow. *See* A2 (stating that the Glider Decision is “consistent with the intent and purpose of [the Air Office’s] planned course of action”). *Cf. Clean Air Council*, 862 F.3d at 6 (explaining that “an order delaying the rule’s effective date” is “tantamount to amending or revoking a rule”).

The Glider Decision also violates Congress’s substantive instructions to EPA. The Clean Air Act commands that EPA “shall by regulation prescribe ... standards applicable to” pollution from “new motor vehicles or new motor vehicle engines” that “may reasonably be anticipated to endanger public health or welfare,” 42 U.S.C. 7521(a)(1), and the statute also requires manufacturers and suppliers to comply with those standards, 42 U.S.C. 7522(a)(1). The 2016 Rule reflects a considered “judgment” by EPA, *ibid.*, that current controls on emissions from glider vehicles are necessary to avoid endangering public health and welfare. *See* A405–06; A595. The Glider Decision does not question that judgment or the factual findings upon which it is based; it ignores it. And yet, at the same time, EPA reverses course and invites

manufacturers and suppliers to put thousands more gliders on the roads, spewing enormous quantities of pollution into the air the public breathes. This is not just a dereliction of the specific statutory duty at issue in this case; it is a dereliction of EPA's overriding duty under the Clean Air Act "to protect and enhance the quality of the Nation's air resources so as to promote the public health and welfare." 42 U.S.C. 7401(b)(1).

This Court should not permit an agency to so easily circumvent the clear procedural and substantive requirements of its governing statute merely by issuing blanket "nonenforcement decisions" in an effort to impose a new Administration's favored policy on a nationwide basis, without regard to whether that new policy is lawful or based upon reasoned decisionmaking and public engagement.

B. The Glider Decision is arbitrary and capricious.

The only rationale given for the Glider Decision is that "it is in the public interest to avoid profound disruptions to small businesses." A3. But it is the epitome of arbitrary and capricious action to elevate one factor and ignore all others, particularly where the agency completely disregards the factors expressly made relevant by the statute. *See Michigan v. EPA*, 135 S. Ct. 2699, 2707 (2015) ("[R]easonable regulation ordinarily requires paying attention to the advantages *and* the disadvantages of agency decisions.").

When EPA promulgated the 2016 Rule, it recognized that glider vehicles generally have nitrogen oxide and particulate matter emissions *20-40 times* higher than other new vehicles. A405–06. Each glider vehicle using an old engine thus “results in significantly higher in-use emissions of air pollutants associated with a host of adverse human health effects, including premature mortality.” A406. EPA evaluated the environmental impact of continued glider sales at the then-current rate of 10,000 gliders per year: In 2025, gliders “would emit nearly 300,000 tons of NO_x and nearly 8,000 tons of PM annually,” representing “about one third of all NO_x and PM emissions from heavy-duty tractors.” A406 (emphasis omitted). EPA found that “[b]y restricting the number of glider vehicles with high polluting engines on the road, these excess PM and NO_x emissions will decrease dramatically, leading to substantial public health-related benefits.” A406.

The Glider Decision nowhere acknowledges, much less considers, those factual findings or the profound effects the decision will have on public health and welfare as EPA encourages these super-polluting trucks to be manufactured and put on the public roads. When changing course, an agency cannot “disregard[] facts and circumstances that underlay ... the prior policy,” as EPA has done here. *FCC v. Fox Television Stations, Inc.*, 556 U.S. 502, 515–16 (2009).

For the reasons stated above, this Court should declare the Glider Decision unlawful and order EPA to rescind it. At a minimum, this Court should order the

agency to put the decision on hold pending further review in order to avert irreparable harm to petitioners and the general public.

II. Petitioners will suffer irreparable injury absent a stay.

EPA issued the Glider Decision to immediately and substantially affect the primary conduct of glider manufacturers and suppliers by encouraging them to produce more super-polluting trucks in violation of existing law. EPA explained that manufacturers that “have reached” their 2018 production cap for super-polluting trucks were limited to producing emission-compliant trucks for the remainder of this calendar year. A3. The agency determined that this “disruption[.]” in those manufacturers’ operations was not “in the public interest,” and it broadcast to those manufacturers and their suppliers that they may flout the law this year and next without threat of agency enforcement. A3. EPA’s reason for doing all this now, as opposed to waiting for an actual rulemaking, was its understanding that manufacturers are *right now* able, willing, and ready to produce noncompliant gliders in excess of the legal limit but are precluded from doing so by existing law.

But the flip side of the Glider Decision’s immediate effect on glider producers is immediate and substantial harm to petitioners and their members from greater—much greater—production of super-polluting diesel freight trucks in 2018 and 2019, all to occur before this Court ordinarily could be expected to decide the merits of this case. A114 (consultant’s estimate of “at least 11,190 additional non-compliant

glider vehicles being produced and sold in 2018–19” due to Glider Decision). *Compare* A3 (Glider Decision stating that it expires no later than 12 months after issuance), *with* Administrative Office of the U.S. Courts, Federal Court Management Statistics of the Courts of Appeals (Mar. 2018) (reflecting median duration of 12.2 months for cases filed in this Court). A stay of the Glider Decision pending review thus is necessary both in aid of this Court’s jurisdiction and to prevent irreparable harm to petitioners. *See Winter v. Nat. Res. Def. Council, Inc.*, 555 U.S. 7, 22 (2008) (explaining that movant for interlocutory relief must show likelihood of “suffer[ing] irreparable harm *before a decision on the merits can be rendered*” (emphasis added and citation omitted)).

The harm to petitioners will be “both certain and great, actual and not theoretical, beyond remediation, and of such *imminence* that there is a clear and present need for equitable relief to prevent irreparable harm.” *Mexichem Specialty Resins, Inc. v. EPA*, 787 F.3d 544, 555 (D.C. Cir. 2015). An analysis based on EPA’s own numbers and modeling methods, combined with 2017 glider registration data, reveals that “for the remainder of 2018, on average, [the Glider Decision] will likely result in 30 additional [noncompliant] glider sales per day.” A123. The additional super-polluting trucks expected to be produced as a result of the glider decision will emit “more than 430,000 tons of excess NO_x and more than 7,300 tons of excess PM_{2.5}” over their lifetimes, causing “an estimated additional 760–1,746 premature

deaths” compared to an equivalent number of trucks compliant with current air-pollution standards. A114.

Many of these effects will be felt immediately, before this Court could be expected to resolve the merits—or even this motion—on a normal schedule. *See* A114 (estimate of additional emissions through 2019). Those emissions alone will cause petitioners irreparable harm, as stated below. But the proper metric to use in evaluating irreparable harm in this case is the *lifetime* emissions of glider trucks that will be produced and sold before the Court resolves this case. In considering irreparable injury from air pollution, the relevant question is not what emissions will actually occur in the period before the Court may be expected to provide relief on the merits, but what emissions will be “beyond remediation” by the time that relief arrives. *Mexichem*, 787 F.3d at 555. The Clean Air Act regulates emissions from new motor vehicles almost exclusively at the point of manufacture, *see* 42 U.S.C. 7522, and once a vehicle is produced and sold, “there is no ready means for [EPA]” or this Court “to ‘claw back’ the vehicle from the private purchaser.” A231–32. *See* A117 (“In 2025 over 95 percent of these gliders will likely still be on the road and will still be emitting over 24,000 tons excess NO_x and over 400 tons excess PM per year.”). Thus, a showing of irreparable harm in this context turns on the actual harm that

additional glider trucks will cause during their lifetime of service, not the harm the trucks will cause before the merits are resolved.²

“Diesel exhaust is one of the most dangerous and pervasive forms of air pollution.” A171. Decades of epidemiological and toxicological studies “report associations between short-term and long-term diesel exhaust exposures and a range of chronic and acute adverse health impacts.” A172. In particular, emissions of PM_{2.5} from diesel exhaust will “aggravate[] respiratory illness” and “can lead to premature mortality,” A175, 700; and emissions of NO_x from diesel exhaust will “contribut[e] to respiratory illness, cardiovascular disease, and premature death.” A177. *See also* A697–99.

Diesel exhaust from super-polluting glider freight trucks affects certain populations and individuals especially, including petitioners’ members. For example, the 5-year-old son of Shana Reidy has a rare genetic disorder that “makes him acutely sensitive to ... respiratory infections” that are “potentially life-threatening.” A161, 163. Both short-term and long-term exposure to diesel exhaust from heavy-

² Even if the merits could be resolved on an expedited basis, a substantial part of the harm from the Glider Decision in 2018 will occur in the very near future given the “risk of massive pre-buys” while this Court reviews the policy. A463. Experience shows that sales of noncompliant gliders spike during periods of regulatory transition, *see, e.g.*, A148 (dealer citing spike in glider sales in January 2018), and given the legal vulnerability of the Glider Decision, manufacturers will rush to produce and sell a high volume of gliders as quickly as possible.

duty freight trucks “exacerbate his underlying health condition,” and that exposure is unfortunately plentiful given the Reidy family’s proximity to and frequent use of the congested I-5 corridor in Seattle, Washington. A163–65. *See also* A175–77, 198–99, 700–01. The family also spends several hours per month traveling on “a two-lane highway that is heavily trafficked by heavy-duty logging trucks.” A165. *See also* A294 (comment of dealer that gliders “are making a strong foothold in the logging sector”). During those trips especially, Reidy’s son can find himself “trapped behind a heavy-duty truck with particularly high diesel exhaust emissions”—*e.g.*, a noncompliant glider—that can trigger an acute and potentially life-threatening respiratory infection. A165. *See also* A173.

The more than 11,000 additional glider trucks to be produced as a direct result of the Glider Decision will enter a national market and inevitably “travel across the lower 48 [States]” in the ordinary course of business. A153. And heavy-duty freight traffic tends to congregate in certain corridors, *see* A137, 198–99, making it “likely,” *Winter*, 555 U.S. at 20, that some of the thousands of additional super-polluting glider trucks prompted by the Glider Decision will worsen ground-level ozone and fine-particle pollution in Reidy’s ambient environment and in particular on the roadways where she travels frequently with her son.

The Reidys are far from alone. *See* A175 (“[A]bout 19% of the U.S. population lives within 500 meters of high [traffic] volume roads.”). Elizabeth Brandt and

her family live nearby the East-West Highway in Montgomery County, Maryland, “a major thoroughfare with significant freight truck traffic,” A86; *see* A198, and her daughters (ages 2 and 5) frequently “swim[] in [an] outdoor pool” that is less than 50 meters from the I-495 Beltway. A86; *see* A198. Janet DietzKamei, who “suffer[s] from severe asthma,” A91, lives near and travels on several major California freeways where she is “sometimes ... stuck immediately behind heavy duty trucks,” A94, whose diesel exhaust can precipitate a life-threatening asthma attack. *See* A698–99. DietzKamei “cannot leave the house without wearing a mask” when local PM_{2.5} or ozone levels are elevated. A92. Peggy Evans lives “approximately 3 blocks from” I-40 in central Tennessee, the “only highway near” a glider-manufacturing facility a mere thirty minutes away. A99–101. *See also* A137. The short- and long-term health effects of diesel freight-truck pollution are most severe in these areas, which are in very close proximity to heavily trafficked roadways. A174, 178, 703.

In summary, if left unchecked, the Glider Decision will have its intended result of drastically increasing the number of super-polluting heavy duty freight trucks on American roadways, thus leading to severe and irreparable health harms to petitioners’ members and the public at large.³ A123 (consultant’s estimate that “each *day’s* worth of [additional noncompliant] glider sales” triggered by the Glider

³ These same injuries, caused by the Glider Decision and redressable by its rescission, suffice to establish petitioners’ standing to challenge EPA’s action.

Decision will “result in between 2.0 and 4.7 premature mortalities” (emphasis added)). *See also Amoco Prod. Co. v. Village of Gambell*, 480 U.S. 531, 545 (1987) (“Environmental injury, by its nature, can seldom be adequately remedied by money damages and is often permanent or at least of long duration, i.e., irreparable.”); *Beame v. Friends of the Earth*, 434 U.S. 1310, 1313-14 (1977) (Marshall, J., in chambers) (same for adverse impacts of “air pollution” on “those with respiratory ailments”). A stay pending review is therefore warranted.

III. The balance of equities tips sharply in favor of a stay.

The equities on the other side are virtually nonexistent. Neither EPA nor its favored group of manufacturers and suppliers has a valid interest in violating existing law. It is a bedrock principle of our legal system that no person has a legitimate interest in engaging in illegal activity. *See, e.g., United States v. Williams*, 553 U.S. 285, 297 (2008) (“Offers to engage in illegal transactions are categorically excluded from First Amendment protection.”); *Illinois v. Caballes*, 543 U.S. 405, 408-09 (2005) (explaining that the Fourth Amendment’s privacy protections do not extend to an interest in possessing contraband). Yet unlawful activity is the only thing that the Glider Decision was designed to protect. *See* A3.

Even setting aside its illegality, the interest of glider manufacturers and their suppliers in producing and selling more noncompliant vehicles is more than offset by the *legitimate* interests of the manufacturers and suppliers of heavy-duty diesel

freight trucks that will compete directly with glider companies for the same market share.⁴ *See* A145–50, 155–59. EPA’s concern for “loss of jobs” and “the viability of” glider companies, A3, apparently does not extend to other trucking jobs and companies that are harmed by the unlevel playing field that the Glider Decision creates. *See* A144, 148–50, 153, 158–59. As between the two, the equities lie with those businesses that justifiably relied on *existing law* to make “important investments ... in modern technology and safety features,” A158; *see also* A213–15, rather than businesses that unjustifiably relied on a *proposed rule* to defer those investments.

IV. The public interest favors a stay.

“In exercising their sound discretion, courts of equity should pay particular regard for the public consequences” when deciding whether to issue an injunction. *Winter*, 555 U.S. at 24. The public consequences of condoning EPA’s course of action in this case would be far-reaching and detrimental to the rule of law. The question for this Court is whether to permit an agency to bypass lawful procedures for amending a regulation with which it disagrees on policy grounds and simply announce to the world that the rule will not be enforced until such time as the agency

⁴ It is worth noting that Fitzgerald, the country’s leading glider manufacturer, has indicated that it could “make a profit at 300 [noncompliant-glider vehicles produced] a year,” as permitted by existing law. A600. There is thus good reason to question EPA’s supposition that “the viability of” glider manufacturers is “threaten[ed]” by the application of existing law. A3.

divines a rationale for repealing it. This Court has rejected similar gambits by the same agency in the recent past, *see Clean Air Council*, 862 F.3d 1, and the public interest demands that the Court put the Glider Decision on hold rather than permit it to accomplish its destructive purpose before judicial review is had.

Moreover, “a court sitting in equity cannot ‘ignore the judgment of Congress, deliberately expressed in legislation.’” *United States v. Oakland Cannabis Buyers’ Co-Op.*, 532 U.S. 483, 497 (2001) (citation omitted). Congress has deliberately expressed a preference for “the greatest degree of [NO_x and PM_{2.5}] emission reduction achievable” by “heavy-duty vehicles and engines” “through the application of [available] technology,” 42 U.S.C. 7521(a)(3)(A)(i), in order to avoid “endanger[ing] public health or welfare.” 42 U.S.C. 7521(a)(1). The Glider Decision stands in direct opposition to that mandate, and a stay of its operation is in the public interest.

CONCLUSION AND REQUEST FOR IMMEDIATE RELIEF

For the foregoing reasons, this Court should either summarily vacate the Glider Decision or stay its effect pending judicial review.

In light of the ongoing, substantial, and irreparable harm caused by the EPA action under review—serious health harms that can be expected to worsen even in the days or weeks it takes this Court to decide this motion—and the lawless character of that action, petitioners respectfully request that this Court immediately enter an administrative stay of EPA’s “No Action Assurance” until such time as it rules upon

this motion. *See, e.g., In re Kellogg Brown & Root, Inc.*, 796 F.3d 137, 143 (D.C. Cir. 2015). If this Court declines to enter an administrative stay, petitioners respectfully request a decision on this motion before August 8, 2018.

Respectfully submitted,

/s/ Matthew Littleton

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CERTIFICATE OF COMPLIANCE

I hereby certify that the foregoing motion is printed in Times New Roman, a proportionally spaced 14-point font, and that, according to the word-count function in Microsoft Word 365, the motion contains 6,846 words, in compliance with Circuit Rule 8(b).

/s/ Matthew Littleton
Matthew Littleton

ADDENDUM

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

July 6, 2018

OFFICE OF
ENFORCEMENT AND
COMPLIANCE ASSURANCE

MEMORANDUM

SUBJECT: Conditional No Action Assurance Regarding Small Manufacturers of Glider Vehicles

FROM: Susan Parker Bodine 
Assistant Administrator
Office of Enforcement and Compliance Assurance

TO: Bill Wehrum
Assistant Administrator
Office of Air and Radiation

Pursuant to your attached request of July 6, 2018, I am today providing a “no action assurance” relating to: (1) those small manufacturers to which 40 C.F.R. § 1037.150(t) applies that either are manufacturing or that have manufactured glider vehicles in calendar year 2018 (Small Manufacturers); and (2) to those companies to which 40 C.F.R. § 1037.150(t)(1)(vii) applies that sell glider kits to such Small Manufacturers (Suppliers).

As noted in your memorandum, in conjunction with EPA’s having promulgated in 2016 the final rule entitled Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles—Phase 2, *see* 81 Fed. Reg. 73,478 (Oct. 25, 2016) (the HD Phase 2 Rule), the Agency specified that glider vehicles were “new motor vehicles” (and glider vehicle engines to be “new motor vehicle engines”) within the meaning of 42 U.S.C. § 7550(3). Effective January 1, 2017, Small Manufacturers were permitted to manufacture glider vehicles in 2017 in the amount of the greatest number produced in any one year during the period of 2010–2014 without having to meet the requirements of 40 C.F.R. § 1037.635 (Interim Allowance). After this transitional period, beginning on January 1, 2018, small manufacturers of glider vehicles have been precluded from manufacturing more than 300 glider vehicles (or fewer, if a particular manufacturer’s highest annual production volume between 2010 and 2014 had been below 300 vehicles), unless they use engines that comply with the emission standards applicable to the model year in which the glider vehicle is manufactured. On November 16, 2017, EPA published a notice of proposed rulemaking, proposing to repeal the emissions standards and other requirements of the HD Phase 2 Rule as they apply to glider vehicles, glider engines, and glider kits. *See* 82 Fed. Reg. 53,442 (Nov. 16, 2017) (November 16 NPRM).

We understand that after taking into consideration the public comments received, and following further engagement with stakeholders and other interested entities, the Office of Air and Radiation (OAR) has determined that additional evaluation of several matters is required before it can take final action on the November 16 NPRM. Consequently, OAR now recognizes that finalizing the November 16 NPRM will require more time than it had previously anticipated. In the meantime, Small Manufacturers who, in reliance on the November 16 NPRM, have reached their calendar year 2018 annual allocation under the HD Phase 2 Rule must cease production for the remainder of calendar year 2018 of additional glider vehicles, resulting in the loss of jobs and threatening the viability of these Small Manufacturers.

As noted in your memorandum, OAR now intends to move as expeditiously as possible to undertake rulemaking in which it will consider extending the compliance date applicable to Small Manufacturers to December 31, 2019.

Consistent with the intent and purpose of OAR's planned course of action, this no action assurance provides that EPA will exercise its enforcement discretion with respect to the applicability of 40 C.F.R. § 1037.635 to Small Manufacturers that in 2018 and 2019 produce for each of those two years up to the level of their Interim Allowances as was available to them in calendar year 2017 under 40 C.F.R. § 1037.150(t)(3). This no action assurance further provides that EPA will exercise its enforcement discretion with respect to Suppliers that sell glider kits to those Small Manufacturers to which this no action assurance applies. This no action assurance will remain in effect until the earlier of: (1) 11:59 p.m. (EDT), July 6, 2019; or (2) the effective date of a final rule extending the compliance date applicable to small manufacturers of glider vehicles.

The issuance of this no action assurance is in the public interest to avoid profound disruptions to small businesses while EPA completes its reconsideration of the HD Phase 2 Rule. The EPA reserves its right to revoke or modify this no action assurance.

If you have further questions regarding this matter, please contact Rosemarie Kelley of my staff at (202) 564-4014, or kelley.rosemarie@epa.gov.

Attachment

cc: Byron Bunker, OAR, OTAQ
Rosemarie Kelley, OECA, OCE
Phillip Brooks, OECA, OCE, AED

MEMORANDUM

SUBJECT: Enforcement Discretion Regarding Companies that Are Producing or that Have Produced Glider Vehicles in Calendar Year 2018

FROM: Bill Wehrum
Assistant Administrator
Office of Air and Radiation

TO: Susan Parker Bodine
Assistant Administrator
Office of Enforcement and Compliance Assurance

7-6-18

The Office of Air and Radiation (OAR) requests that the Office of Enforcement and Compliance Assurance (OECA) exercise enforcement discretion (No Action Assurance) with respect to both those small manufacturers to which 40 C.F.R. § 1037.150(t) applies that either are manufacturing or that have manufactured glider vehicles in calendar year 2018 (Small Manufacturers), and to those companies to which 40 C.F.R. § 1037.150(t)(1)(vii) applies that sell glider kits to such small manufacturers (Suppliers). Specifically, as a bridge to a rulemaking in which we will consider extending the deadline for Small Manufacturers to comply with 40 C.F.R. § 1037.635, OAR requests that OECA provide assurance that it will exercise enforcement discretion for up to one year with respect to the applicability to Small Manufacturers and their Suppliers of 40 C.F.R. § 1037.635. Further, OAR requests that OECA provide assurance that it will not take enforcement action against those Suppliers that elect to sell glider kits to those Small Manufacturers of glider vehicles to which this No Action Assurance applies.

In conjunction with EPA's having promulgated in 2016 the final rule entitled Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles—Phase 2, 81 Fed. Reg. 73,478 (Oct. 25, 2016) (the HD Phase 2 Rule), the Agency clarified that glider vehicles were “new motor vehicles” (and glider vehicle engines to be “new motor vehicle engines”) within the meaning of 42 U.S.C. § 7550(3). EPA in the HD Phase 2 Rule also stated that glider kits constituted “incomplete motor vehicles.” Effective January 1, 2017, Small Manufacturers were permitted to manufacture glider vehicles in 2017 in the amount of the greatest number produced in any one year during the period 2010-2014 without meeting the requirements of 40 C.F.R. § 1037.635 (Interim Allowance). After this transitional period, beginning on January 1, 2018, small manufacturers of glider vehicles have been precluded from manufacturing more than 300 glider vehicles (or fewer, if a particular manufacturer's highest annual production volume from between 2010 and 2014 had been below 300 vehicles), unless they use engines that comply with the emission standards applicable to the model year in which the glider vehicle is manufactured.

On November 16, 2017, EPA published in the *Federal Register* a notice of proposed rulemaking, proposing to repeal the emissions standards and other requirements of the HD Phase 2 Rule as they apply to glider vehicles, glider engines, and glider kits. 82 Fed. Reg. 53,442 (Nov. 16, 2017) (November 16 NPRM). In the November 16 NPRM, EPA proposed an interpretation of the Clean Air Act (CAA) under which glider vehicles would be found not to constitute “new motor

vehicles” within the meaning of CAA section 216(3), glider engines would be found not to constitute “new motor vehicle engines” within the meaning of CAA section 216(3), and glider kits would not be treated as “incomplete” new motor vehicles. Under this proposed interpretation, EPA would lack authority to regulate glider vehicles, glider engines, and glider kits under CAA section 202(a)(1). EPA also sought comment on whether, were it not to promulgate this proposed interpretation of the CAA, the Agency should increase the interim provision’s allocation available to small manufacturers above the current applicable limits (*i.e.*, at most, 300 glider vehicles per year). 82 Fed. Reg. 53,447. Further, EPA solicited comment on whether the compliance date for glider vehicles and glider kits set forth at 40 C.F.R. § 1037.635 should be extended. *Id.*

After taking into consideration the public comments received, and following further engagement with stakeholders and other interested entities, OAR has determined that additional evaluation of a number of matters is required before it can take final action on the November 16 NPRM. As a consequence, OAR now recognizes that finalizing the November 16 NPRM will require more time than we had previously anticipated.

OAR intends to complete this rulemaking as expeditiously as possible under these circumstances, consistent with the Agency’s responsibility to ensure that whatever final action it may take conforms with the Clean Air Act and is based on reasoned decision making. In the meantime, while the emissions standards and other requirements of the 2016 Rule applicable to glider vehicles became effective on January 1, 2017, and the Interim Allowance for calendar year 2017 ceased to apply as of January 1, 2018. As a consequence, Small Manufacturers who, in reliance on the November 16 NPRM, have reached their calendar year 2018 interim annual allocation under the HD Phase 2 Rule must cease production for the remainder of 2018, resulting in the loss of jobs and threatening the viability of these Small Manufacturers.

In light of these circumstances, OAR now intends to move as expeditiously as possible to undertake rulemaking to consider extending the compliance date applicable to Small Manufacturers until December 31, 2019. Concurrently, we intend to continue to work towards expeditiously completing a final rule. OAR requests a No Action Assurance in order to preserve the status quo as it was at the time of the November 16 NPRM until such time as we are able to take final action on extending the applicable compliance date. Specifically, OAR requests that OECA exercise its enforcement discretion with respect to Small Manufacturers who in 2018 and 2019 produce for each of those two years up to the level of their Interim Allowance as was available to them in 2017 under 40 C.F.R. § 1037.150(t)(3). OAR requests that OECA leave this No Action Assurance in place for one year from the date of issuance, or until such time as EPA takes final action to extend the compliance date, whichever comes sooner.

I appreciate your prompt consideration of this request.

CERTIFICATE OF SERVICE

I hereby certify that on this 17th day of July, 2018, I served a copy of the foregoing document on respondent United States Environmental Protection Agency through this Court's CM/ECF System.

/s/ Matthew Littleton
Matthew Littleton

United States Court of Appeals
FOR THE DISTRICT OF COLUMBIA CIRCUIT

No. 18-1190**September Term, 2017****EPA- 07/06/18 Letter****Filed On:** July 18, 2018

Environmental Defense Fund, et al.,

Petitioners

v.

Environmental Protection Agency,

Respondent

BEFORE: Rogers, Griffith*, and Wilkins, Circuit Judges**ORDER**

Upon consideration of the emergency motion for stay or summary disposition and request for administrative stay, it is

ORDERED that the request for administrative stay be granted, and the “no action assurance” memorandum dated July 6, 2018 be stayed pending further order of the court. The purpose of this administrative stay is to give the court sufficient opportunity to consider the emergency motion and should not be construed in any way as a ruling on the merits of that motion. See D.C. Circuit Handbook of Practice and Internal Procedures 33 (2018). It is

FURTHER ORDERED, on the court’s own motion, that respondent file a response to the emergency motion by 4:00 p.m. on Wednesday, July 25, 2018. Any reply is due by 4:00 p.m. on Friday, July 27, 2018. The parties are directed to hand-deliver the paper copies of their submissions to the court by the time and date due.

Per Curiam**FOR THE COURT:**

Mark J. Langer, Clerk

BY: /s/
Robert J. Cavello
Deputy Clerk

* Circuit Judge Griffith would deny the request for an administrative stay.




UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

July 26, 2018

OFFICE OF
THE ADMINISTRATOR

MEMORANDUM

SUBJECT: Withdrawal of Conditional No Action Assurance Regarding Small Manufacturers of Glider Vehicles

FROM: Andrew R. Wheeler 
Acting Administrator

TO: Susan Parker Bodine
Assistant Administrator, Office of Enforcement and Compliance Assurance

William L. Wehrum
Assistant Administrator, Office of Air and Radiation

After review of the “Conditional No Action Assurance Regarding Small Manufacturers of Glider Vehicles” (No Action Assurance), signed on July 6, 2018 (attached), and upon further consideration as explained below, I am today withdrawing this No Action Assurance.

On July 6, 2018, the Office of Air and Radiation requested that the Office of Enforcement and Compliance Assurance exercise enforcement discretion through a no action assurance with respect to: 1) those small manufacturers to which 40 C.F.R. § 1037.150(1) applies that either are manufacturing or that have manufactured glider vehicles in calendar year 2018 (Small Manufacturers), and 2) those companies to which 40 C.F.R. § 1037.150(t)(1)(vii) applies that sell glider kits to such small manufacturers (Suppliers). OAR explained in this request that in November 2017 the EPA had proposed reconsideration of provisions applicable to glider vehicles in the 2016 HD Phase 2 Rule¹ and was working toward a final action, but needed additional time to evaluate matters before taking final action. In the interim, industry compliance with the glider requirements of the HD Phase 2 Rule was resulting in the loss of jobs and threatening the viability of Small Manufacturers. Thus, OAR requested a No Action Assurance to preserve the status quo for Small Manufacturers and Suppliers as it was at the time of the November 2017 proposed rule reconsidering the HD Phase 2 Rule until such time as the EPA was able to take final action on, among other possible regulatory revisions, a rule extending the applicable compliance date for glider vehicles.

¹ Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles-Phase 2, *see* 81 Fed. Reg. 73,478 (Oct. 25, 2016) (the HD Phase 2 Rule).

On July 6, 2018, OECA issued a No Action Assurance pursuant to this request, stating that the EPA intends to exercise its enforcement discretion through July 6, 2019, or the effective date of a final rule extending the compliance date applicable to Small Manufacturers, whichever is earlier, with respect to the applicability of 40 C.F.R. § 1037.635 to Small Manufacturers that in 2018 and 2019 produce for each of those two years up to the level of their Interim Allowances as was available to them in calendar year 2017 under 40 C.F.R. § 1037.150(1)(3), and that the EPA also will exercise its enforcement discretion during the same period with respect to Suppliers that sell glider kits to those Small Manufacturers to which the No Action Assurance applied. The No Action Assurance explained that this use of enforcement discretion was in the public interest to avoid profound disruptions to small businesses while the EPA completes its reconsideration of the HD Phase 2 Rule. The No Action Assurance also explained that EPA reserves its right to revoke or modify this no action assurance.

Three environmental groups² and a coalition of states³ filed several separate administrative requests for the EPA to either immediately withdraw or administratively stay the No Action Assurance. On July 17, 2018, the environmental groups petitioned for review of the No Action Assurance in the D.C. Circuit and filed an emergency motion for stay or summary vacatur in the D.C. Circuit, and a request for an administrative stay during the court's consideration of the emergency motion. On July 18, the court issued an administrative stay of the No Action Assurance for the duration of time the court considers the emergency motion. On July 19, 2018, the same coalition of states filed a similar petition and emergency motion for summary vacatur, or, in the alternative, for stay pending judicial review, in the same court.

OECA has a general guidance limiting the circumstances under which the agency will consider issuing no action assurances.⁴ The 1995 restatement of that policy states that the principles against the issuance of a no action assurance are at "their most compelling in the context of rulemakings." OECA guidance is clear that a no action assurance should be issued only in an "extremely unusual" case when the no action assurance is necessary to serve the public interest and only when no other mechanism can adequately address that interest. Thus, historically OECA has issued no action assurances to address situations where the balance of the public interest supported the EPA temporarily and narrowly exercising its enforcement discretion.

After consultation with OAR, OECA and OGC, and after further consideration of the No Action Assurance and information before me, including the administrative and judicial petitions and motions, and the application of agency guidance regarding no action assurances to these particular facts, I have concluded that the application of current regulations to the glider industry does not represent the kind of extremely unusual circumstances that support the EPA's exercise of enforcement discretion. I am therefore withdrawing the July 6, 2018, No Action Assurance.

² Environmental Defense Fund, Center for Biological Diversity, and Sierra Club.

³ California, Connecticut, Delaware, Illinois, Maine, Maryland, Massachusetts, Minnesota, New Jersey, New Mexico, New York, North Carolina, Oregon, Pennsylvania, Rhode Island, Vermont, Washington and the District of Columbia.

⁴ Memorandum from Courtney M. Price, Assistant Administrator for Enforcement and Compliance Monitoring, to Assistant Administrators, Regional Administrators, General Counsel, and Inspector General, Policy Against "No Action" Assurance (Nov. 16, 1984); Memorandum from Steven A. Herman, Assistant Administrator for Enforcement and Compliance Assurance, to Assistant Administrators, Regional Administrators, General Counsel, and Inspector General, Processing Requests for Use of Enforcement Discretion (March 3, 1995).

Furthermore, the EPA will not offer any other no action assurance to any party with respect to the currently applicable requirements for glider manufacturers and their suppliers. Instead, OAR shall continue to move as expeditiously as possible on a regulatory revision regarding the requirements that apply to the introduction of glider vehicles into commerce to the extent consistent with statutory requirements and due consideration of air quality impacts.

Attachment



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

July 6, 2018

OFFICE OF
ENFORCEMENT AND
COMPLIANCE ASSURANCE

MEMORANDUM

SUBJECT: Conditional No Action Assurance Regarding Small Manufacturers of Glider Vehicles

FROM: Susan Parker Bodine *Susan Parker Bodine*
Assistant Administrator
Office of Enforcement and Compliance Assurance

TO: Bill Wehrum
Assistant Administrator
Office of Air and Radiation

Pursuant to your attached request of July 6, 2018, I am today providing a “no action assurance” relating to: (1) those small manufacturers to which 40 C.F.R. § 1037.150(t) applies that either are manufacturing or that have manufactured glider vehicles in calendar year 2018 (Small Manufacturers); and (2) to those companies to which 40 C.F.R. § 1037.150(t)(1)(vii) applies that sell glider kits to such Small Manufacturers (Suppliers).

As noted in your memorandum, in conjunction with EPA’s having promulgated in 2016 the final rule entitled Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles—Phase 2, *see* 81 Fed. Reg. 73,478 (Oct. 25, 2016) (the HD Phase 2 Rule), the Agency specified that glider vehicles were “new motor vehicles” (and glider vehicle engines to be “new motor vehicle engines”) within the meaning of 42 U.S.C. § 7550(3). Effective January 1, 2017, Small Manufacturers were permitted to manufacture glider vehicles in 2017 in the amount of the greatest number produced in any one year during the period of 2010–2014 without having to meet the requirements of 40 C.F.R. § 1037.635 (Interim Allowance). After this transitional period, beginning on January 1, 2018, small manufacturers of glider vehicles have been precluded from manufacturing more than 300 glider vehicles (or fewer, if a particular manufacturer’s highest annual production volume between 2010 and 2014 had been below 300 vehicles), unless they use engines that comply with the emission standards applicable to the model year in which the glider vehicle is manufactured. On November 16, 2017, EPA published a notice of proposed rulemaking, proposing to repeal the emissions standards and other requirements of the HD Phase 2 Rule as they apply to glider vehicles, glider engines, and glider kits. *See* 82 Fed. Reg. 53,442 (Nov. 16, 2017) (November 16 NPRM).

We understand that after taking into consideration the public comments received, and following further engagement with stakeholders and other interested entities, the Office of Air and Radiation (OAR) has determined that additional evaluation of several matters is required before it can take final action on the November 16 NPRM. Consequently, OAR now recognizes that finalizing the November 16 NPRM will require more time than it had previously anticipated. In the meantime, Small Manufacturers who, in reliance on the November 16 NPRM, have reached their calendar year 2018 annual allocation under the HD Phase 2 Rule must cease production for the remainder of calendar year 2018 of additional glider vehicles, resulting in the loss of jobs and threatening the viability of these Small Manufacturers.

As noted in your memorandum, OAR now intends to move as expeditiously as possible to undertake rulemaking in which it will consider extending the compliance date applicable to Small Manufacturers to December 31, 2019.

Consistent with the intent and purpose of OAR's planned course of action, this no action assurance provides that EPA will exercise its enforcement discretion with respect to the applicability of 40 C.F.R. § 1037.635 to Small Manufacturers that in 2018 and 2019 produce for each of those two years up to the level of their Interim Allowances as was available to them in calendar year 2017 under 40 C.F.R. § 1037.150(t)(3). This no action assurance further provides that EPA will exercise its enforcement discretion with respect to Suppliers that sell glider kits to those Small Manufacturers to which this no action assurance applies. This no action assurance will remain in effect until the earlier of: (1) 11:59 p.m. (EDT), July 6, 2019; or (2) the effective date of a final rule extending the compliance date applicable to small manufacturers of glider vehicles.

The issuance of this no action assurance is in the public interest to avoid profound disruptions to small businesses while EPA completes its reconsideration of the HD Phase 2 Rule. The EPA reserves its right to revoke or modify this no action assurance.

If you have further questions regarding this matter, please contact Rosemarie Kelley of my staff at (202) 564-4014, or kelley.rosemarie@epa.gov.

Attachment

cc: Byron Bunker, OAR, OTAQ
Rosemarie Kelley, OECA, OCE
Phillip Brooks, OECA, OCE, AED

MEMORANDUM

SUBJECT: Enforcement Discretion Regarding Companies that Are Producing or that Have Produced Glider Vehicles in Calendar Year 2018

FROM: Bill Wehrum
Assistant Administrator
Office of Air and Radiation



7-6-18

TO: Susan Parker Bodine
Assistant Administrator
Office of Enforcement and Compliance Assurance

The Office of Air and Radiation (OAR) requests that the Office of Enforcement and Compliance Assurance (OECA) exercise enforcement discretion (No Action Assurance) with respect to both those small manufacturers to which 40 C.F.R. § 1037.150(t) applies that either are manufacturing or that have manufactured glider vehicles in calendar year 2018 (Small Manufacturers), and to those companies to which 40 C.F.R. § 1037.150(t)(1)(vii) applies that sell glider kits to such small manufacturers (Suppliers). Specifically, as a bridge to a rulemaking in which we will consider extending the deadline for Small Manufacturers to comply with 40 C.F.R. § 1037.635, OAR requests that OECA provide assurance that it will exercise enforcement discretion for up to one year with respect to the applicability to Small Manufacturers and their Suppliers of 40 C.F.R. § 1037.635. Further, OAR requests that OECA provide assurance that it will not take enforcement action against those Suppliers that elect to sell glider kits to those Small Manufacturers of glider vehicles to which this No Action Assurance applies.

In conjunction with EPA's having promulgated in 2016 the final rule entitled Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles—Phase 2, 81 Fed. Reg. 73,478 (Oct. 25, 2016) (the HD Phase 2 Rule), the Agency clarified that glider vehicles were “new motor vehicles” (and glider vehicle engines to be “new motor vehicle engines”) within the meaning of 42 U.S.C. § 7550(3). EPA in the HD Phase 2 Rule also stated that glider kits constituted “incomplete motor vehicles.” Effective January 1, 2017, Small Manufacturers were permitted to manufacture glider vehicles in 2017 in the amount of the greatest number produced in any one year during the period 2010-2014 without meeting the requirements of 40 C.F.R. § 1037.635 (Interim Allowance). After this transitional period, beginning on January 1, 2018, small manufacturers of glider vehicles have been precluded from manufacturing more than 300 glider vehicles (or fewer, if a particular manufacturer's highest annual production volume from between 2010 and 2014 had been below 300 vehicles), unless they use engines that comply with the emission standards applicable to the model year in which the glider vehicle is manufactured.

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vehicles” within the meaning of CAA section 216(3), glider engines would be found not to constitute “new motor vehicle engines” within the meaning of CAA section 216(3), and glider kits would not be treated as “incomplete” new motor vehicles. Under this proposed interpretation, EPA would lack authority to regulate glider vehicles, glider engines, and glider kits under CAA section 202(a)(1). EPA also sought comment on whether, were it not to promulgate this proposed interpretation of the CAA, the Agency should increase the interim provision’s allocation available to small manufacturers above the current applicable limits (*i.e.*, at most, 300 glider vehicles per year). 82 Fed. Reg. 53,447. Further, EPA solicited comment on whether the compliance date for glider vehicles and glider kits set forth at 40 C.F.R. § 1037.635 should be extended. *Id.*

After taking into consideration the public comments received, and following further engagement with stakeholders and other interested entities, OAR has determined that additional evaluation of a number of matters is required before it can take final action on the November 16 NPRM. As a consequence, OAR now recognizes that finalizing the November 16 NPRM will require more time than we had previously anticipated.

OAR intends to complete this rulemaking as expeditiously as possible under these circumstances, consistent with the Agency’s responsibility to ensure that whatever final action it may take conforms with the Clean Air Act and is based on reasoned decision making. In the meantime, while the emissions standards and other requirements of the 2016 Rule applicable to glider vehicles became effective on January 1, 2017, and the Interim Allowance for calendar year 2017 ceased to apply as of January 1, 2018. As a consequence, Small Manufacturers who, in reliance on the November 16 NPRM, have reached their calendar year 2018 interim annual allocation under the HD Phase 2 Rule must cease production for the remainder of 2018, resulting in the loss of jobs and threatening the viability of these Small Manufacturers.

In light of these circumstances, OAR now intends to move as expeditiously as possible to undertake rulemaking to consider extending the compliance date applicable to Small Manufacturers until December 31, 2019. Concurrently, we intend to continue to work towards expeditiously completing a final rule. OAR requests a No Action Assurance in order to preserve the status quo as it was at the time of the November 16 NPRM until such time as we are able to take final action on extending the applicable compliance date. Specifically, OAR requests that OECA exercise its enforcement discretion with respect to Small Manufacturers who in 2018 and 2019 produce for each of those two years up to the level of their Interim Allowance as was available to them in 2017 under 40 C.F.R. § 1037.150(t)(3). OAR requests that OECA leave this No Action Assurance in place for one year from the date of issuance, or until such time as EPA takes final action to extend the compliance date, whichever comes sooner.

I appreciate your prompt consideration of this request.