DIALOGUE

The Uncertain Future of California's Vehicle Emission Standards

- Summary -

The Donald Trump Administration has proposed to revoke California's long-standing authority to set its own vehicle emission standards. The success of California in mitigating air pollution and reducing greenhouse gas (GHG) emissions under CAA \$209—and that of the 15 states that have invoked waivers under \$177—is now in question. The Trump Administration argues that the \$209 waiver was not intended to "solve climate change" and that its new standards would save consumers \$500 billion. Critics have decried this as a lost opportunity to make significant progress on reducing GHG emissions; they also point out that it contradicts the Administration's stated preference to allow states flexibility to accomplish environmental goals. On December 6, 2018, ELI hosted a Breaking News webinar to discuss the implications of this proposal. As panelists looked forward, they also looked back to the establishment of standards regulating tailpipe pollution in California, an exception that if altered will have significant implications for the future of climate and environmental law nationwide. Below, we present a transcript of the discussion, which has been edited for style, clarity, and space considerations.

Robert L. "Buzz" Hines (moderator) is a Partner at Farella Braun + Martel LLP. He is Chair of the firm's air quality and climate change group and a Fellow at the American College of Environmental Lawyers.

Ann Carlson is the Shirley Shapiro Professor of Environmental Law and Faculty Co-Director of the Emmett Institute on Climate at the University of California, Los Angeles.

Ben Grumbles is Secretary of the Maryland Department of the Environment.

Buzz Hines: I want to thank ELI for its sponsorship and organization of programs like this and for its day-to-day leadership regarding the environment. I want to introduce Secretary Ben Grumbles and Prof. Ann Carlson as we get started.

Ann is the Shirley Shapiro Professor of Environmental Law and the Faculty Co-Director of the Emmett Institute on Climate Change and the Environment at the University of California, Los Angeles (UCLA) School of Law. She's been on the UCLA law school faculty since 1994. Ann regularly publishes in the environmental law field, and is a frequent commenter and speaker on climate and related environmental law topics. You can check out her blog, Legal Planet.¹

Our other panelist is Secretary Grumbles. Ben was confirmed as Secretary of Maryland's Department of the Environment in 2015. Ben has had a long and distinguished career in the nonprofit and government worlds, having served as president of the U.S. Water Alliance and as Assistant Administrator for Water at the U.S. Environmental Protection Agency (EPA). He's been the Environmental Council of the States (ECOS) senior staff member on the Transportation and Infrastructure Committee and Science Committee of the U.S. House of Representatives.

But Ben has not spent all of his time on the East Coast and around the Mid-Atlantic states; he was also the director of Arizona's Department of Environmental Quality. So, he brings a little bit of the desert influence to our panel today as well.

This has been a really interesting topic to cover. One of the interesting things is that the process of this rulemaking and the whole issue of the California waiver have been a subject of discussion since the Trump Administration came into power.

The specific issue that we're talking about today has to do with the standards that regulate pollution from tailpipes. While we're primarily focused on California, this is an issue that affects all of us. It's a nationwide issue.

The establishment of these standards in terms of giving California the right to have more stringent standards and to

^{1.} Legal Planet, http://legal-planet.org/ (last visited Jan. 31, 2019).

regulate tailpipe emissions arises out of \$209 of the Clean Air Act (CAA).² What those particular amendments did is create a situation where California was at one point in time the only state that was allowed an exception to set its own standards. That exception, if altered, could certainly have a significant effect on the future of climate and environmental law nationwide, but especially in California.

As a backdrop, in early August EPA, along with the National Highway Traffic Safety Administration (NHTSA), released a plan to freeze in 2020 the fuel standards that had been set as of 2012.³ The old rule had gradually increased standards from 2017 to 2025. As I think we'll talk about shortly, those standards were pretty well-set. The auto industry had been working through those standards from a design perspective and things were proceeding apace.

The rulemaking that is in place now and that we're going to talk about is called the Safer Affordable Fuel Efficient Vehicles Rule, otherwise known as SAFE.⁴ With the release of that rule, the Energy Policy and Conservation Act of 1975 (EPCA)⁵ is implicated because it set certain fuel economy standards for cars. In the context of this rule, there are certain preemption issues that would be created. That would have the direct effect of the revocation of the \$209 regulation and waiver that California has, but it would also create issues regarding other waivers with respect to \$177. We'll talk about \$177—and as Ben likes to refer to them, "the \$177 states"—in more detail.

California, as I said, is not the only state. There are other states that have adopted what we call California's clean car rules. They include Connecticut, Delaware, Maine, Maryland, Massachusetts, New Jersey, New York, Oregon, Pennsylvania, Rhode Island, Washington, and Vermont. Those states were recently joined by Colorado, which voted to join the §177 states as well.

What we'll talk about today is the genesis of the waiver. Then, we'll talk specifically about this particular rulemaking and the comments that California and other states have submitted. Ben and Ann can provide a broader perspective than just getting into the weeds of the legal rulemaking. We'll be able to get into some of that perspective through our own back-and-forth and hopefully through audience questions as well. With that, Ann, can you start us off and talk a bit about how this all started?

Ann Carlson: Let me give you a bit of a caveat, and that is I'm a proponent of strong greenhouse gas emission standards for the transportation sector. I have filed some comments and so forth in the rulemaking proceedings. You

should know this at the outset so you can take my comments with that background in mind.

I also want to remind everyone of the daily context. I think when you open the newspaper or click on E&E News, every day there is more alarming information about climate change and greenhouse gas emissions. Just yesterday, there was a big New York Times piece about the fact that 2018 has seen the largest amount of greenhouse gases emitted in history. A big reason for the increase is the increasing emissions in the transportation sector around the planet—people driving more, people driving bigger cars, more people driving cars, particularly outside the United States.

There's also a recent article about the melting of the Greenland ice sheet. It is the fastest melting in at least 350 years, but probably 7,000 to 8,000 years. That has huge implications for sea-level rise around the globe. The fourth National Climate Assessment⁸ was released the day after Thanksgiving. In it, the Trump Administration itself and 13 of its agencies acknowledged that we are experiencing the effects of climate change already. We're experiencing them around the country in the form of increased drought, increased wildfires, agricultural production interferences, increased risk of disease from mosquito-borne illnesses like Zika and dengue fever, increased ozone pollution particularly in the Southeast at a time when the federal government has just ratcheted the ozone standard tighter, and so on. I think it's important to keep that background in mind given that the greenhouse gas emission standards are designed to reduce the effects of climate change, and that the Trump Administration itself acknowledges that freezing the standards will in fact increase U.S. contributions to greenhouse gases.

With that in mind, let me move to the history of the waiver. I do want to point out that the Trump Administration not only proposes freezing the standards at 2020 levels, but also revoking the California waiver with respect to two separate programs, although they're contained in the same waiver. One is for the greenhouse gas emissions standards, and the other is for California's Zero Emission Vehicle (ZEV) Program. There are actually different \$177 states for each of those programs. Not every state has signed up for both of them, and I think they actually raise different legal questions.

But as Buzz suggested, I can provide a bit of history about the waiver. Some of it you may know, but it's worth setting up the context for just how important California has been in the fight against air pollution. The state decided to enter the greenhouse gas emission regulation business in

^{2. 42} U.S.C. §§7401-7671q, ELR STAT. CAA §§101-618.

^{3.} The Safer Affordable Fuel Efficient (SAFE) Vehicles Proposed Rule for Model Years 2021-2026, U.S. EPA, https://www.epa.gov/regulations-emissions-vehicles-and-engines/safer-affordable-fuel-efficient-safe-vehicles-proposed (last visited Feb. 17, 2019).

^{4. 83} Fed. Reg. 42986 (Aug. 24, 2018).

^{5.} Pub. L. No. 94-163, 89 Stat. 871 (1975).

Kendra Pierre-Louis, Greenhouse Gas Emissions Accelerate Like a "Speeding Freight Train" in 2018, N.Y. Times (Dec. 5, 2018), https://www.nytimes. com/2018/12/05/climate/greenhouse-gas-emissions-2018.html.

Alejandra Borunda, What Greenland's "Unprecedented" Ice Loss Means for Earth, Nat'l Geographic (Dec. 5, 2018), https://www.national geographic.com/environment/2018/12/ greenland-ice-sheet-is-melting-faster-than-in-the-last-350-years/.

FOURTH NATIONAL CLIMATE ASSESSMENT, U.S. GLOBAL CHANGE RESEARCH PROGRAM (2018), available at https://www.globalchange.gov/nca4.

2003 with the passage of legislation that required its Air Resources Board to issue the first greenhouse gas emission standards for passenger automobiles.⁹

California was the first state in the country to have emission standards for tailpipes for conventional auto pollutants. Those came into effect for the 1966 model year. The federal government pretty immediately thereafter adopted the California standards and they actually accomplished a lot. The standards cut carbon monoxide pollutants by about 30% and hydrocarbons by about 50%. As California began to regulate, other states started to show interest, including New York, which set standards that were tougher than California's.

The U.S. Congress came along in 1967 and preempted all states from issuing tailpipe standards for air pollutants under what was then kind of the predecessor to the CAA—with one exception. The exception was that any state that was regulating emissions prior to March 1, 1966, could continue to do so. That was, of course, only the state of California. But in order to continue to regulate, California had to seek a waiver from preemption. That waiver requires California to show a number of things, one of which is that its standards would be more protective of public health and welfare than federal standards. The state also has to show that it has compelling and extraordinary circumstances, and that the standards are essentially going to be technologically feasible, taking cost into account.

So, California then issued another set of standards that came into effect for the 1970 model year. Again, these were pretty dramatic, cutting carbon monoxide by 50% and hydrocarbons by two-thirds. But then the really big thing that happened is that the CAA Amendments of 1970 passed. These amendments contained a requirement that EPA issue regulations to cut tailpipe emissions by 90% by 1975 essentially. There are a couple different years, depending upon the pollutant.

The conventional story is that the 90% standard was what led to, for example, the invention of the catalytic converter, which many people believe is the most important environmental technology ever invented. There is no doubt that the federal law was crucial in getting to the invention of the catalytic converter, but I think a part that gets lost in the story is just how important California was in this. Also really important was how the federal government under William Ruckelshaus, the first EPA Administrator, really used California's power to keep pressure on the auto industry at a time when Congress and the courts had actually started to let the requirements slip.

The story is that those 1975 standards also contained an out so that EPA could give the auto industry an extra year. Ruckelshaus denied that extra year. The court of appeals overturned that in an important decision, ¹⁰ then Congress extended the deadline. So, it wasn't until the early 1980s

that, federally, we actually complied with that 90% standard. But in the meantime, in 1975, Ruckelshaus granted California a waiver that essentially required the installation of the catalytic converter on every California car at a time when the auto manufacturers were saying it wasn't feasible technologically and that they couldn't do it on a mass production basis.

I think it was maybe Ruckelshaus' boldest move as Administrator because what he really did is he used California's willingness to experiment, to let California be a guinea pig for the rest of the country. When California demonstrated that in fact catalytic technology had improved to the point where it could begin to really dramatically cut pollutants and could be installed on virtually every car, that led the rest of the country to be able to follow California's lead.

That really began a process that has gone on for the past 50 years in which California sets standards that are more stringent than the federal government. Typically, the federal government approves the California waiver. Then, if California succeeds, the federal government follows suit. This has been a really interesting back and forth, really unique as far as I can tell in federal law where one state has this kind of first-mover, super-regulator power that then sets the standards for the rest of the country. Then, of course, in 1977 Congress amended the CAA to allow other states to either follow the federal standards or the state standards. Secretary Grumbles will tell us more about the §177 states and what's been going on with them.

One thing that's important to note about the 1970 90% reduction mandate is that, unlike the earlier standards, this was technology-forcing. It wasn't technology-following. With the early standards, it turned out that manufacturers already had the technology in place to cut tailpipe emissions pretty quickly by about one-half. But to get to 90% required not the invention of catalytic technology that already existed, but really the improvement of it and again the ability to implement that technology on every car sold in the United States.

The other really important thing about catalytic technology is that it didn't work with leaded gasoline. So, the 1970 amendments, combined with the California waiver, also led to the elimination of leaded gasoline, probably the single biggest public health achievement in the history of environmental law, leading to really important health benefits such as fewer deaths and higher IQs in kids. I always tell my students that my IQ and the IQs of my generation are probably down by five points or so as a result of our exposure to lead. Thank EPA and the 1970 amendments for the cleanup of lead and the continuing brain health of our kids and future generations.

The catalytic converter kind of story then repeats itself over and over, with California again setting standards seeking a waiver from EPA and then EPA typically following suit. California's applied for 126 waivers over the course of the 1967 statute to the present. EPA has occasionally denied a waiver for technical reasons, but not for substan-

^{9.} See Assemb. B. 1493, ch. 200 (Cal. 2002), available at https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=200120020AB1493.

International Harvester v. Ruckelshaus, 478 F.2d 615, 3 ELR 20133 (D.C. Cir. 1973).

tive reasons. Sometimes, California didn't need it or was denied part of it and then granted part of it later. EPA only once flat out denied a waiver, and I'll talk about that in a minute. Otherwise, EPA has granted the waiver and the result has been quite extraordinary.

I like to quote Alan Lloyd, who's the former chair of the California Air Resources Board, who said in 2003—and this is 15 years ago when cars weren't as clean as they are today—that essentially we've accomplished what we thought was impossible. We have zero evaporative emissions. We have emissions coming out of the tailpipe that are often cleaner than what is coming into the cabin of the car from the outside air. These improvements are lasting for 150,000 miles on the engine. It's an extraordinary accomplishment.¹¹

Many people thought that California regulations would actually lead to the elimination of the internal combustion engine because the regulations are so stringent. In fact, manufacturers have figured out how to comply with those standards and to dramatically clean up cars. We now have low-emission vehicles. We have ultralow-emission vehicles. We have ZEVs. That's not just for greenhouse gases. That's for conventional pollutants. This is all due to the success of the California waiver.

Let me also put this information in terms about just how much cleaner the air is—I'd like to highlight this in part because people continue to think that we breathe such horrible air in Los Angeles. I like to highlight just what the CAA has accomplished, and much of this has been accomplished because of the cleanup of the passenger auto fleet and to some degree the truck fleet.

In 1973, when I was a teenager in southern California, there were 126 Stage 1 smog alert days. That's roughly one-third of the days out of the year. The smog was so bad that we were advised to stay inside. Our eyes burned regularly. Our lungs burned regularly. We haven't had a Stage 1 smog alert since 2003. That includes some bad ozone days this year as a result of things like wildfires, but the air is so much cleaner than it used to be.

It was also the case that we had 100 days of carbon monoxide violations per year in the 1970s. We no longer have any violations, and that's true around the country. Lead concentrations in the atmosphere in the United States have dropped by about 96% since 1980. These are extraordinary health accomplishments, and they also are extraordinary economic accomplishments as people have missed fewer workdays. People are healthier overall, don't go to doctors as much, and so forth. So, it's really worth highlighting, I think, how extraordinarily successful this waiver provision and this back and forth between California and the federal government have been.

There have been two important blips that I think are important to highlight in the waiver conversation. The first

blip involved ZEVs. I highlight the ZEV program for two reasons. First, because, as I said, the ZEV waiver that California currently has in place is part of the Trump Administration proposal for revocation. But I also point it out because California hasn't always succeeded in regulating in a way that is cost-effective and works. In the early 1990s, California had a very stringent ZEV mandate. It was very expensive to comply with and the state ultimately had to back off for how much it was requiring of manufacturers because they couldn't meet the requirements.

I say that for two reasons. One, because the federal government gets the benefit of California actually experimenting. California's been willing to take on that burden in part because our own air pollution problems are sufficiently bad, but also because out of failure often comes a lot of learning. We've made enormous strides in manufacturing and producing many more ZEVs, and that early experiment in the 1990s has been one of the reasons why.

The second reason is related to greenhouse gas emissions. In 2003, California, as I said, passed a bill to mandate that its Air Resources Board issue greenhouse gas emission standards for passenger automobiles. The state sought a waiver and EPA under the George W. Bush Administration denied California's waiver, principally on the grounds that California did not meet the criterion that the standards be issued for compelling and extraordinary circumstances. The general argument by the Bush Administration was that California's problems with climate change are not unique in the way they are with air pollution; therefore, they don't meet the compelling and extraordinary circumstances requirement.

That resulted not surprisingly in a series of court battles, but the U.S. Court of Appeals for the District of Columbia (D.C.) Circuit never ruled on California's lawsuits arguing that EPA had inappropriately denied the waiver, because by the time that case would have been heard, Barack Obama was elected president. California went ahead and developed its regulations even though it couldn't implement them. They were actually supposed to go into effect for the 2009 model year. President Obama came in and essentially extended them and harmonized them with the corporate average fuel economy standards under the EPCA for 2012 to 2016.¹²

Those standards went into place. They were part of a broader negotiation with the auto industry over bailouts. Remember, this is the time of the Great Recession. It is important to note that the battle over the waiver delayed the implementation of the standards for California by three years, and it is also important to note that California retained its waiver but agreed to harmonize its regulations with the federal regulations essentially to have one national standard. There was a new round of standards that were negotiated for 2016 to 2025. The Trump Administration

Press Release, California Air Resources Board, ARGB Modifies Zero-Emission Vehicle (ZEV) Regulation, (Apr. 24, 2003), available at https:// www.arb.ca.gov/newsrel/nr042403.htm.

^{12.} Press Release, The White House, Obama Administration Finalizes Historic 54.5 MPG Fuel Efficiency Standards (Aug. 28, 2012), available at https://obamawhitehouse.archives.gov/the-press-office/2012/08/28/obama-administration-finalizes-historic-545-mpg-fuel-efficiency-standard.

is now proposing freezing the standards at 2020 levels and not allowing the gradual ratcheting up of the standards through 2025.

That's essentially where we are today. There are lots of distinct and interesting legal questions that will arise if the Trump Administration in fact goes forward with its proposal to freeze the standards and to revoke the waiver. Those will be separate lawsuits. California has already indicated that it will sue over the waiver. It has already set the stage. It has filed suit in the D.C. Circuit over the interim review that EPA had to do, and that the Trump Administration changed.¹³ Then a different set of states will sue over the freezing of the standards. This is great fodder for administrative lawyers.

I think one of the really interesting and probably compelling arguments that the states are going to have on the freeze is the quality of the administrative record at least to date if the standards are in fact frozen. There's been a lot of critique of the assumptions in some of the math used by the Trump Administration in arguing that freezing the standards would in fact improve vehicle safety and reduce highway fatalities. That's the central basis that the Trump Administration is using to freeze the standards. There are a lot of questions about whether the administrative record actually supports that conclusion.

I will stop here and turn it over to Secretary Grumbles. Then, we can have a broader conversation about some of the legal questions that the waiver revocation and the freeze in the standards raise.

Buzz Hines: Thanks, Ann. The background is fantastic. For anyone that remembers California especially in the 1970s, what Ann has just said will resonate. There were so many days where you couldn't go outside. It was unsafe. You couldn't see the Santa Monica Mountains to the west. You couldn't see the San Gabriel Mountains to the east. And I would say that visits to the Los Angeles Basin dating back 20 years have just been an incredible transformation. You realize why people move there, because it's a beautiful area and you can now see it.

So, I think that context is important. It probably gives a good segue, Ben, to talk about your experience. One of the things that is interesting is the different hats you have to wear. Maybe you could speak to that a little bit and then weave into that how the \$177 process has worked. Maryland is obviously a proponent of the current standards as they exist and not a fan of the rollback. It'd be good to get the perspective from the states.

Ben Grumbles: Ann, I feel a lot smarter after listening to your comprehensive, thorough review of the history. Buzz, I also wear a hat as a former congressional staffer. I would like to encourage people this week, after the passing of President George H.W. Bush, to look back in a biparti-

san way at some of the environmental achievements of the kinder and gentler and greener side of President Bush: the CAA Amendments of 1990, the Acid Rain Program, some of the urban air toxics programs, as well as wetlands conservation and regulation of oil spills.

The two hats I'm wearing primarily for this conversation include the hat I wear as the Secretary of the Environment for Gov. Larry Hogan. Clearly, we are opposed to freezing standards or rolling back clean car rules. Our state has fully adopted the California §177 programs for pollution and for greenhouse gas emissions and also for the ZEVs. We're not going to make progress toward our aggressive greenhouse gas reduction goals in the state of Maryland, 40% reduction of greenhouse gases by 2030, if we're in reverse at the federal level on the clean car rule and some of the other important components of the \$177 program.

I think it's really important for lawyers and for anyone involved in this conversation to know that it's kind of a mislabeling of the "California" waiver. There are so many states—Maryland and more than a dozen others, 13 now and 15 if you include California and Colorado—that are very supportive of this fundamental principle of states being able to enforce stringent standards for tailpipes beyond the federal standard.

The other hat I wear and am proud to wear is as the Chair of the Air Committee for ECOS. Alan Matheson, who heads up the Utah Department of Environmental Quality, is the Vice Chair. We have robust discussion and participation among environmental secretaries around the nation. One of the resolutions that ECOS passed in 2017 was to firmly reinforce the states' rights angle of this issue.

Collectively, the states agreed in September 2017 to send a strong signal by passing a resolution that states must be allowed to exercise their discretion to regulate pollutants within their borders and develop standards more stringent than federal regulations as long as the standards do not conflict with federal law. The resolution also urges Congress to retain and not limit any state's authority to adopt or enforce pollutant standards that are more stringent than the federal standards, directing Congress to retain and not limit California's authority to adopt or enforce emission standards for any air pollutants from any mobile sources. Also, to retain and not limit any state's ability under CAA \$177 to adopt California's vehicle emissions standards.

As Ann and Buzz described, we've seen tremendous progress for air quality, including criteria pollutant nitrogen oxide (NO_x) and volatile organic compounds, but we also see the importance of reducing greenhouse gas emissions through the tailpipe emissions standards to essentially what was adopted and agreed upon and now 13 states and Washington, D.C., have used to make real progress. Clean air is health care. And for us in Maryland, we know that while we continue to make significant progress in reducing criteria pollutants and in particular NO_x emissions from stationary sources, we have an ongoing challenge and great opportunity because we are part of the \$177 program and

have our own state clean air rules to make significant progress in reducing emissions.

About 70% of pollutants in the state are from out of state, and about one-half of those are from mobile sources. When you look at greenhouse gas emissions, you have to recognize that about one-half of those emissions, actually one-third of the Maryland carbon dioxide emissions, are from cars in-state. So, Governor Hogan has been very clear as a Republican governor that we need bipartisan science-based solutions. Rolling back the clean car rules, the CAA, specifically the California waiver provisions, is unacceptable. We and other states believe this is not a California waiver battle. It's a states-for-clean-air battle.

The \$177 process is one where states like ours have to update our rules. We adopted California's \$177 regulations that they adopted through \$209 of the CAA. We have to update our rules any time there's a change to the California rules and regulations. Each of those states that's a \$177 state uses different methods to incorporate California's emission standards. In Maryland, since we've incorporated them by reference, we need to include changes to our regulations. We are in the process of updating those regulations to conform to the recent changes made by California, which we hope to finalize by the end of 2018. We'll continue to take steps to make sure that regulation of emissions from cars is moving forward, not backward.

I also get to wear the hat of being a very active member in the Ozone Transport Commission. For us, a major, major opportunity for the future—which the Ozone Transport Commission has pitched with the Obama Administration and is now pitching with the Trump Administration—is for EPA to work with the states on the challenge of aftermarket catalytic converters. How can we try to get the clunkers, the catalytic converters that are no longer performing as well as they should? How do we create incentives and work within the separate sovereignties of each of the states through public-private partnerships? That's going to be a big opportunity.

But the bottom line for Maryland and many states that are part of ECOS is that it's a states' rights issue, it's a public health issue. We've weighed in with some very specific legal arguments that track the various provisions under the CAA to stand up and say we are opposed to freezing the standards or reducing opportunities for California and other states to have more stringent standards for greenhouse gases, as well as for other pollutants that we're tracking.

Buzz Hines: Thanks for that, Ben. I think we all can recognize the irony because a lot of what is going on in the context of the rulemaking in terms of rolling back the waivers and creating preemption is very much at odds with a lot of other aspects of the Administration where states are allowed to and in fact directed to set their own environmental course. I think your state and other states

are, perhaps we shall say, perplexed by the nature of what's going on.

Perhaps at this point we can get a little bit into the weeds and talk about the comments that have been submitted in some of the different proceedings. Ann, as you pointed out, every day there are headlines that can either distract or divert our attention that I think have a real relationship to what we're talking about in terms of the health risks, the clean air, and having standards moving forward and not rolling back. I think it would be good to talk a bit about SAFE and some of the comments and commentary that have been submitted in terms of challenges and comments on the rulemaking.

Ben, you noted that Maryland has been active in that regard. California's formal comments run 415-plus pages. You mentioned, Ann, the administrative record and some of the arguments that are looking very closely and critically at the rule. You mentioned math errors and other things, and related to that, I recommend an article by Robinson Meyer published in *The Atlantic*.¹⁴

What the Meyer article pointed out, and I think this is consistent too with a number of the comments that have been submitted, is that they look at the rules with a critical eye. The rule is called SAFE based on the notion that by eliminating these waivers and having a more unified approach to emission standards, by allowing the auto industry to roll back and to move in a slightly different direction, automobile use and travel will become less dangerous based on newer cars being more prevalent in the market. There have been a number of comments that have been posted and submitted that are critical of the rulemaking. I'm speaking in the context of some of the analyses associated with getting older cars off the road, having newer cars that are safer cars be purchased by the American consuming public. Perhaps in some other respects as well, allowing for a broader consumer choice in terms of what the marketplace might offer. Ann, maybe you can speak to some of those specifics.

Ann Carlson: Let me separate legal questions that deal with the waiver from the freezing of the standards, because they are distinct. Let me start with freezing the standards and the overarching legal claim that I think might be the most effective particularly in light of the new fourth National Climate Assessment that again is authored by Trump Administration agencies, obviously mostly by civil servants and by scientists who volunteer to write the report, but nevertheless issued by the Trump Administration.

What's most interesting to me about that document is it acknowledges harms that are occurring right now from climate change that will get worse if we don't get emissions under control. At the same time, EPA was required as a

Robinson Meyer, The Trump Administration Flunked Its Math Homework, THE ATLANTIC (Oct. 31, 2018), https://www.theatlantic.com/science/archive/2018/10/trumps-clean-car-rollback-is-riddled-with-math-errors-clouding-its-legal-future/574249/.

result of *Massachusetts v. Environmental Protection Agency*¹⁵ to decide whether greenhouse gas emissions endanger public health and welfare under the CAA. That was done under the Obama Administration, but has not been revoked. Then EPA must specifically figure out whether to regulate tailpipe emissions. That's what *Massachusetts* was about.

I think one basic legal argument is whether you can say that you are reducing the endangerment from greenhouse gases that your own agencies acknowledge is happening now and that will get worse if you don't reduce greenhouse gas emissions. Can you then freeze standards that stop the reduction of greenhouse gas emissions? Is that consistent with the endangerment language of the CAA? That's a basic argument that will be front and center in this litigation.

But then, there are all these administrative record issues, Buzz, as you suggested. For example, as I understand it, and this is mostly from the Meyer article, there are some basic economic assumptions in the administrative record that are just wrong. For instance, the assumption is that the Obama Administration rules would increase the cost of cars; therefore, more people would buy more new cars. That just doesn't make sense from a basic economic perspective. As prices go up, usually you see people keeping their old cars longer.

There are some other odd assumptions. There's a math error that apparently looks at safety data that's supposed to be applied to a full year and it's only applied to one quarter. So, it inflates the estimate that EPA and NHTSA make about the number of deaths that will occur as a result of traffic accidents resulting from the Obama rules and that it will be safer if we freeze those rules.

The administrative record is replete with these errors that seem to be really basic and for which the Administration has had no real response. That raises important questions about whether the decision they're making is arbitrary and capricious under standard administrative law principles. Jonathan Adler, who's a conservative law professor at Case Western Reserve University School of Law, has raised questions about whether this administrative record can actually sustain freezing the standards. ¹⁶

Then, the waiver questions are separate. There's kind of a baseline question, and that is does EPA have the power to revoke a waiver? The statute talks about the power to grant a waiver. But once a waiver has been granted, can EPA revoke it? That's a statutory interpretation question. Then there's the question about whether California has met the "compelling and extraordinary circumstances" language of the waiver. The Obama Administration found in fact that California had. There's a lengthy record that's developed in that regard with air pollution and with greenhouse gas emissions.

EPA has always found that California meets the compelling and extraordinary circumstances language. Impor-

tantly, reducing greenhouse gases will also limit ozone pollution, something else that is acknowledged in the National Climate Assessment by the Trump Administration. That may be important for figuring out whether the state meets compelling and extraordinary circumstances.

Remember that the Bush Administration argued that climate change wasn't unique to California. But California is supposed to meet very stringent new 2015 ozone standards imposed by the federal government at a time when the federal government is trying to limit its authority to regulate tailpipe emissions, both greenhouse gases and conventional pollutants, with the ZEV mandate. So, I think these interactions of ozone standards and greenhouse gas emission reductions are going to be really important.

Finally, I think there's a general background question at a time when we are seeing more and more alarming information coming out about climate change, including the information I referenced at the beginning of my remarks about 2018 being the biggest emissions year in history driven largely by transportation emissions, whether that has an overall effect on the seriousness with which the court is going to evaluate these claims. It's hard to know. It's sort of a background question about the degree to which the seriousness of the problem actually motivates judges. But the kind of drumbeat of alarming information I think can't help the Administration.

Buzz Hines: Ann, the waiver issue is before the D.C. Circuit now, is that correct?

Ann Carlson: No. What's before the D.C. Circuit right now is a challenge to a report that EPA issued. So, the 2016 to 2025 standards were issued. They included a requirement that EPA conduct an interim review to determine whether it will be feasible for manufacturers to comply with the later year standards. The Obama Administration conducted and completed that review before the end of its Administration, and then the Trump Administration reopened it and issued a new review that not surprisingly concluded that it's not economical or technologically feasible for manufacturers to meet the standards. That review has been challenged by California and other states, and the D.C. Circuit is letting that go forward.

The waiver hasn't actually been revoked yet. California has made very clear that it will sue if the Trump Administration does in fact try to revoke it. I think that's a kind of line in the sand that California will not allow to be crossed. There are settlement negotiations, I think, that are ongoing. But one thing California will not do is allow its authority under the waiver provision to be revoked without legal challenge. The state will absolutely challenge that, but it hasn't happened yet, because there's not a final decision.

Buzz Hines: Ben, from Maryland's perspective, how have you folks been proceeding in terms of all these different fronts that Ann has identified?

^{15. 549} U.S. 497, 37 ELR 20075 (2007).

^{16.} See supra note 14.

Ben Grumbles: One very specific action has been to send EPA strong comments that the state of Maryland, through the Hogan Administration and through the Maryland Department of the Environment, is strongly opposed to the SAFE Rule. We have also been working with our colleagues in other states and the attorney general's office is working with other attorneys general to make sure there are common strategies for getting into the weeds and demonstrating the technical feasibility of the California program.

Another very important strategy for us in Maryland is that, because we also are part of the ZEV Program, we know in order to succeed on that front we've got to be looking for game-changers while also maintaining current environmental standards and regulations. So, one of the very important debates that's playing out in Maryland and other states around the country is how best to invest Volkswagen settlement dollars on transportation electrification. Our state is hoping to max out on that. The eligibility's up to 15% of the funding that states get through the Volkswagen settlement. It can be spent for electric vehicle infrastructure, and we're maxing out on that front.

But we must also look for new ways to finance the electric vehicle infrastructure. Our state puts a tremendous amount of emphasis on that. Our Department of Transportation chairs the Electric Vehicle Infrastructure Council. One of the big debates and opportunities for us in Maryland is the role of the utilities in helping to fund electric vehicle infrastructure. That's playing out in the Public Service Commission in the state.

All of those are important, and challenging, and noble environmental goals that our state has. It doesn't help us one bit if the federal standards are weakened, if the California program is weakened. I would say I'm wearing my hat, Buzz, as a member of ECOS, which has the great political and geographic diversity of the nation. All of the states salute cooperative federalism. It's not a new concept. It does require getting into the specifics and particularly on matters of transboundary multijurisdictional pollution, which is absolutely what we're talking about with mobile sources of pollution whether it's greenhouse gases or criteria pollutants, NO_x, and ozone. We need to ensure that there's a proper and strong federal standard, but that there can be local and neighborhood solutions.

So, the ECOS hat is cooperative federalism. We're not saying that a downwind state gets to dictate how an upwind state runs its state and regulates its stationary and mobile sources or sets its energy policy. But under the current federal CAA, there absolutely are safeguards and important provisions for downwind states to ensure that they have a fighting chance at attainment when it comes to ozone and NO_x. That is another reason why our state has filed a petition under the CAA with respect to smog, interstate ozone, to get EPA to step in and regulate those stationary sources in upwind states that we know are contributing to our ozone problems if they're not always running the controls that they installed during the hot summer season.

Buzz Hines: That's always been a hot button issue for the Mid-Atlantic states. I wanted to go back to your mentioning of ECOS and cooperative federalism. I'm sure there's not unanimity with respect to how the states are viewing this. And there's the §177 states. Are there no other coalitions that have developed, or is there any kind of a broad statement or unified view among the states that is present with respect to these particular issues?

Ben Grumbles: I would say it is an evolving proposition. You're absolutely right that some of the states are not on the same page as others. What ECOS has done and through the Air Committee what we recognize is that states are going to come at some of these issues and details a little bit differently. But we continue to have an existing resolution that was passed in September 2017 that recognizes the need for flexibility among the states and an appropriate role for EPA. It does pretty clearly resolve that states must be allowed the discretion to regulate pollutants within their borders, and also develop standards that are more stringent than federal government regulations. The states seem to be fairly unified in urging Congress to retain and not limit any state's authority to adopt or enforce pollutant standards that are more stringent than the federal standards.

I think it was a really good step forward for EPA to announce a few weeks ago that they were going to move forward in a collaborative process for heavy-duty diesel emissions.¹⁷ That's a good start. We'll see how that plays out. There's not unanimity among the states when you bring up the subject of \$177, the SAFE Rule, and the California waiver. But there is a strong recognition among the states that we need federal standards and they need to be sufficient, and good neighbor state implementation plans need to be worth the paper they're printed on.

Buzz Hines: Right. That brings up an interesting point. What's the viewpoint of the states? We don't have an automaker representative on our panel, but it's been interesting to see some of the different reactions from the auto industry as well. Maryland and California both have renewable portfolio standards, meaning that there needs to be a percentage or a very high percentage of energy that the state derives from renewable sources.

We've also talked about the ZEV requirements and rules and the fact that the auto industry is moving with some degree of alacrity toward a wholly electric fleet. Volvo announced that every new car they introduce will be electrified in 2019.¹⁸ And speaking of headline news, we had General Motors (GM) announcing that they were going to cut a lot of labor in the United States and close some facto-

^{17.} Press Release, U.S. EPA, ICYMI: The Washington Post-EPA to Weigh Tougher Pollution Standards for Heavy-Duty Trucks (Nov. 14, 2018), available at https://www.epa.gov/newsreleases/icymi-washington-post-epa-weigh-tougher-pollution-standards-heavy-duty-trucks.

^{18.} Our Future Is Electric, VOLVO, https://www.volvocars.com/us/about/electrification (last visited Jan. 31, 2019).

ries.¹⁹ There were some presidential tweets on this subject. One of the statements that GM came back with was that they were going to be directed somewhat by the market-place, but their move into electric vehicles was something that was not going to stop.

I just toss that out. I've also seen that Honda, GM, and maybe some other automakers too have signaled unease, if not quite opposition to the rollback. Any comments from either of you about the dynamic that we're facing both economically and in the context of the rulemaking?

Ann Carlson: I have one observation and it comes back to the history of California leading on the waiver and on automotive technology. One of the things that I really worry about with the proposal to revoke the California waiver and also to freeze the standards is that we're really ceding the push for innovation in the automotive sector to countries outside the United States. I'm not sure whether they will succeed.

So, one question I really have is, as these automakers announce that they're moving to electric vehicles, will they really stick with that? Because they also said at the time of the bailout in 2009 that they were moving to much more fuel-efficient vehicles, smaller vehicles. Yet, we've seen an explosion in the sport utility vehicle market as gas prices have been low. So, I'm a bit skeptical about some of these announcements and whether they will actually happen.

But more importantly, it's really important to recognize just how crucial California and the United States have been to exporting clean technology around the world. Catalytic converters are now standard and required in China, Europe, and all around the globe. The U.S. economy has benefitted as a result, and obviously the health of the global community has benefitted. I hate to see California not having the authority to continue to lead in green technology. Massive amounts of venture dollars are invested in California because of our climate policies.

Part of that is automotive technology. If the state doesn't have the ability to force that technology in a way that it did with the catalytic converter, either the technology is not going to get developed as rapidly or we're going to cede our technological edge to China, which is talking about phasing out internal combustion engines by the mid-2020s, and to other countries that are going to step into the regulatory void. So, it's another important point to stress, that it seems like we ought to actually attract bipartisan support. The state of Maryland has certainly been on board with California in a way that you haven't seen at the federal level.

Ben Grumbles: Yes, we are big supporters of the clean car movement through technology and science-based regulation. The technologies needed to meet the existing model

year 2021 through 2025 emission standards are already available, and cost-effective, and in use today. Technology that was not even contemplated in 2012 during the prior California waiver review process now provides tremendous opportunities that could be incorporated into the current rule. This technology includes direct injection engines, new turbo charger designs, cylinder deactivation, continuously variable transmissions, and 48-volt mild hybrid systems. So, we're hopeful that, with standards in place and with ambitious and aggressive environmental standards, the market will continue to respond and not put the safety of passengers at risk.

All of those reasons add up to continuing to move forward and try to accelerate the role of transportation and mobile sources as problem solvers as the technology gets cleaner and cleaner. Part of that is how the electric vehicle infrastructure gets funded and supported. That's going to be important for us in Maryland and many other states certainly in the Northeast Mid-Atlantic corridor, where we have challenges not just with greenhouse gas emissions from mobile sources, but smog, NO_x emissions, and volatile organic compounds from vehicles.

Also, like many coastal states, Maryland looks at our ports as an economic engine. Most of this discussion is about vehicle emissions, but the emissions of trains and trucks are very important. Focusing on ports, ports of opportunity for environmental progress, is going to continue to be important. I certainly know that's the case on the West Coast.

Buzz Hines: Ann can speak to that with respect to the Los Angeles harbor, Long Beach, intermodal transport, and everything else. I think you bring up a great point because it is all related. This is a huge element because as we talked about, the transportation sector is a significant contributor of greenhouse gas emissions.

One of the issues associated with this rule is the notion that you're not necessarily going to have people driving less miles. You're seeing situations, we see this in California, of tremendously long commutes. Many of those commutes do not have an infrastructure that is designed toward the transportation alternatives, Ben, that you've spoken to. So, you've got a lot of people in their cars. They're commuting long distances.

If you've got cars that are getting lower gas mileage, you're going to have to fill your tank that much more. It's going to be more expensive; you're going to be using more fuel. In turn, there's going to be more greenhouse gas emissions. There's a lot of troubling aspects of this, but I think one of the things that we're speaking to is the degree to which all these various things need be aligned and need to be looked at in a more unified fashion. That's where the role of the states in terms of the ECOS framework and the other frameworks really is important.

I think as we begin to wrap up, we can acknowledge that there's a bit of discomfort prognosticating and speculating,

^{19.} Robert Ferris, *GM to Halt Production at Several Plants, Cut More Than 14,000 Jobs*, CNBC (Nov. 26, 2018), https://www.cnbc.com/2018/11/26/gm-unallocating-several-plants-in-2019-to-take-3-billion-to-3point8-billion-charge-in-future-quarters.html.

so I do want to spend some time talking about where this is going to go. We've obviously seen a lot of activity in the context of the rulemaking and, to Ann's other points, the freezing of standards, the waivers, and everything else over the course of the past several months.

We can talk about the degree to which there might be a resolution reached between California, EPA, and the Administration that might drive a broader solution that will then feed into the other \$177 states. Certainly, the dialogue between Mary Nichols, chair of the California Air Resources Board, and acting EPA Administrator Wheeler would not suggest, or would make people a little less than sanguine that things will be worked out. But what are your thoughts on where this is all going to head and where this might end up?

Ann Carlson: I'm not optimistic about settlement.²⁰ I think that's in part because the parties are so far apart right now. California is not going to give in on the waiver. I think that's really clear. They are not going to stand by and let the waiver be revoked. They have a very strong legal case particularly with respect to the ZEV waiver, in my view, because that attacks conventional air pollutants. But I also think they have a strong case on greenhouse gas emissions.

Right now, we're talking about freezing as opposed to gradually easing the standards in some way or giving a little bit in places where auto manufacturers have had some difficulty in compliance or how you count credits, and so on. So, I'm not optimistic. I gather there are differences of opinion between the two federal agencies that are involved as well. I think NHTSA has been far tougher than EPA in trying to get some movement on settlement. I think if it was just with EPA, maybe there'd be a better chance.

I guess the other place to prognosticate is what happens if these cases go all the way to the U.S. Supreme Court and, thus, the appointment of Brett Kavanaugh changes the analysis? The one thing that we can say with some certainty about Justice Kavanaugh and the CAA, which is where at least some of the legal arguments would focus, is that he has been pretty clear that he's not a big fan of using the CAA for regulating greenhouse gases.

On the other hand, he can sometimes adhere to a particular interpretation of statutory language. So, it's hard to know which way the appointment of Justice Kavanaugh cuts with respect to this case. He doesn't like EPA expansively interpreting its authority to regulate greenhouse gases in a particularly aggressive way, but there is some statutory language here that I think might constrain EPA's discretion to limit what California can do. It will be interesting to see how that tension resolves itself if in fact these things get all the way to the Supreme Court.

One other thing is what's happening with the timing with respect to the auto industry. The longer this drags out, the more the auto industry needs to gear up to meet the standards that are currently in place. We're getting up there. We're done with 2018. The 2021 fleets are going to need to be designed really soon, so there's not a lot of time here to resolve this question.

Then there will be a really interesting question if we get into a legal battle, if in fact the Trump Administration does freeze the standards and does, as it proposed, revoke the California waiver: what standards are in place during the pendency of the litigation? Can California succeed in getting a court to let the standards stay in place pending the outcome of the litigation or will EPA be allowed to freeze the standards pending the outcome? If the latter, EPA really gets the victory because these questions are going to take a while to resolve. That will be interesting to watch. Will the courts stay an EPA decision to freeze the regulations? Will it allow California to move forward? And what status quo will be in place during pendency of litigation will be really important.

Buzz Hines: You would hear from the auto industry no doubt weighing in as to what their particular views are. I think for some of these they're beyond the 2021 model year. You would think that for purposes of their own business planning and supply chain they would not want to freeze the standards, but I think that remains to be seen.

Ben, any thoughts from your perspective on how things might play out in the context of what we're talking about today?

Ben Grumbles: It's really dangerous for me to try to prognosticate on the legal outcomes. A fairly safe prognostication though is that you're going to see more and more states join and participate in regional air quality and climate collaborations. The U.S. Climate Alliance has 17 states in it. That's likely to grow. Maryland is a member of that alliance. Although the alliance doesn't address transportation, it is focused on reducing power plant emissions.

The Regional Greenhouse Gas Initiative is one of the best stories never told over the past couple of years in terms of total bipartisanship. It includes five Republican governors, four Democratic governors, and nine states in Northeast New England and the Mid-Atlantic continuing to strengthen their program that adopts a cap-and-invest strategy for emissions. We're poised to welcome back New Jersey and to see Virginia join into that program by the end of 2019. So, from a policy standpoint, while the fractured debates and polarization will continue on some issues, you're going to see more and more states getting involved. And Maryland, through Governor Hogan, is going to continue to insist on forward progress.

Buzz Hines: We appreciate your work in that regard. Last words or thoughts, Ben and Ann?

^{20.} Days before this article went to press, the White House announced that it would no longer engage in settlement discussions with California. See Trump Administration Ends California Talks on Auto Emissions: White House, N.Y. Times (Feb. 21, 2019), https://www.nytimes.com/reuters/2019/02/21/us/politics/21reuters-autos-emissions-california.html.

Ben Grumbles: The timing of this webinar is great for me because I'm leaving for Poland tomorrow for the United Nations climate change conference, where I'll be representing Maryland. The message will be that Maryland and other states are united in making hard progress for easing greenhouse gas emissions and listening to the increasingly sober news from the scientific community in so many of these reports. Mobile sources, transportation and tailpipes in particular, cleaner cars need to be a really important part of that discussion.

Ann Carlson: Thanks, Ben, for your leadership. And I really hope Governor Hogan can persuade a broader bipartisan coalition of states to regulate on climate and to continue to lead on climate.

The only other thing I would say is stay tuned, because this is a space that's changing literally on a daily basis. I'm never sure whether I'm completely caught up, and I follow this really closely. Who knows what will happen? I think our prognostications are only that. It will be interesting to continue to watch this space for developments.