In 2009, under President Barak Obama, the Department of Transportation issued more stringent fuel economy standards. Under the new standards, passenger cars were to average 39 miles per gallon, and light duty trucks 30 mpg, by 2016. In addition, the overall average for vehicles sold in the US was to rise to 35.5 mpg by 2016. See *Environmental Reporter* 40:1159 (2009). These standards were reduced somewhat in 2010, as part of a combined greenhouse gas/CAFÉ rule (discussed below) issued jointly by EPA and NHTSA. See 75 *Fed. Reg.* 25,324 (May 7, 2010). Under the revised CAFÉ standards, manufacturers of passenger cars and light duty trucks will be required to meet an estimated combined average fuel economy level of 34.1 mpg by model year 2016. *Id.* at 25,330. In 2011, the agencies issued greenhouse gas and fuel efficiency standards for heavy duty vehicles and engines for model years 2014-2018. See 76 *Fed. Reg.* 57,106 (September 15, 2011). And in 2012, despite sharp criticism by members of the House of Representatives Oversight and Government Reform Committee, who argued that the rules would be too costly, EPA and NHTSA promulgated combined greenhouse gas and fuel economy standards for passenger cars and light duty trucks for model years 2017-2025. See 77 *Fed. Reg.* 62,624 (Oct. 14, 2012). The resultant CAFE standards were issued as a two-phase program.

The first phase, from MYs 2017-2021, includes final standards that are projected to require, on an average industry fleet wide basis, a range from 40.3-41.0 mpg in MY 2021. The second phase of the CAFE program, from MYs 2022-2025, includes standards that are not final, due to the statutory requirement that NHTSA set average fuel economy standards not more than 5 model years at a time. Rather, those standards are augural, meaning that they represent NHTSA's current best estimate, based on the information available to the agency today, of what levels of stringency might be maximum feasible in those model years. NHTSA projects that those standards could require, on an average industry fleet wide basis, a range from 48.7-49.7 mpg in model year 2025.

*Id.* at 62,627. Further, EPA calculated that its new carbon dioxide limits (discussed below) would result in a fuel efficiency of 54.5 mpg by model year 2025, if the CO₂ limit is “achieved solely through improvements in fuel efficiency.” *Id.* For an analysis of the effects on emission reductions, gasoline usage, and costs of various reduction scenarios, see Valerie J. Karplus and

In June 2015 the EPA proposed more stringent efficiency standards for medium- and heavy-duty trucks. Agencies say that the new standards could reduce CO₂ emissions by 1 billion tons over the lives of regulated vehicles. The trucking industry has argued the proposal would be prohibitively expensive and would disrupt the manufacture and sale of trucks [Environment Reporter 46:3009 (2015)].

In 2018, after sending strong indications that it would strike a different balance, the Trump administration issued a proposed rule that would significantly lower the fuel economy standards through at least model year 2026. Termed the Safer Affordable Fuel-Efficient Vehicles (or “SAFE”) Rule, the proposal was issued jointly by EPA and NHTSA. See 83 Fed. Reg. 16,820 (Aug. 2, 2018). The use of the acronym SAFE rather than CAFE was apparently intentional, reflecting the administration’s assertion that (presumably smaller) fuel-efficient vehicles are less safe than their predecessors. Indeed, safety and affordability were touted by the agencies as the twin achievements of the proposal:

‘We think we can have a win-win, if we lock in at 2020 levels,’ Bill Wehrum, the assistant administrator for EPA’s Office of Air and Radiation, said in a call with reporters Aug. 2. ‘We’re not imposing undo costs on manufacturers. We’re not imposing undue costs on consumers who want affordable vehicles. And therefore we think as a result of these standards we will be able to have our cake and eat it too.’

Ryen Beene, et al. “U.S. Proposes Easing Auto Mileage Rules, California’s Authority,” Envt. Rptr. (Aug. 2, 2018). The proposal would “lock in” a 2020 standard of 37 mpg through 2026, compared to a 2025 standard of nearly 50 mpg set by the Obama administration. Although the agencies acknowledged that the decrease in fuel efficiency would mean that consumers would pay more for fuel for each mile they drive, they predicted that consumers would actually save money, because the increased costs would cause them to drive less. The proposed rule has been challenged in court by a coalition of state governments.

Add the following Notes 7, 8, and 9 to the Notes on page 567:

7. In May 2009, in response to the Supreme Court’s decision, President Obama announced an initiative to establish national limits on greenhouse emissions from automobiles. In late 2009, EPA made a formal finding that the current and projected atmospheric concentrations of the mix of six long-lived and directly emitted GHGs—CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆ (referred to as “well-mixed greenhouse gases” in the endangerment finding)—are reasonably anticipated to endanger the public health and welfare of current and future generations, and that the emission of these GHGs from new motor vehicles and new motor vehicle engines contributes to this endangerment. See 74 Fed. Reg. 66,496 (Dec. 7, 2009). For the purpose of the endangerment finding and subsequent rulemaking, EPA defined these six GHGs as the “air pollutant” subject to
CAA regulation. Six months later (as discussed above), EPA and the National Highway Traffic Safety Administration issued a joint rule finalizing greenhouse gas emission standards and CAFE standards for new passenger cars, light-duty trucks, and medium-duty passenger vehicles for model years 2012 through 2016. See 75 Fed. Reg. 25,324 (May 7, 2010). Under these standards, passenger cars and light duty trucks will be required to meet an estimated combined average emissions level of 250 grams/mile of CO₂ by the 2016 model year. Id. at 25.330. EPA upped the ante in 2012, as part of a joint rule with NHTSHA governing model years 2017-2025 (discussed above). See 77 Fed. Reg. 62,624 (Oct. 14, 2012). In the preamble to the rule, EPA stated that the progressively more stringent standards are “projected to require, on an average industry fleet wide basis, [a limit of] 163 grams/mile of carbon dioxide (CO₂ ) in model year 2025.” Id. at 62,627.

8. Although a congressional attempt to use the Congressional Review Act (discussed in Chapter 5) to countermand EPA’s endangerment finding, and thus to set aside its subsequent regulation of stationary source and mobile source GHG emissions, failed in a close vote, see Steven D. Cook (2010) “Senate Rejects Murkowski Resolution Aimed at Halting Greenhouse Gas Rules,” Environment Reporter 41:129, a reported 90 lawsuits have been filed challenging one or more of these EPA actions, see Steven D. Cook (2010) “EPA Opposes Industry Motion to Combine Mobile, Stationary Greenhouse Gas Cases,” Environment Reporter 41:2060. The cases were consolidated in the D.C. Circuit, which issued a lengthy ruling upholding both the endangerment finding and the tailpipe emission standards, as well as upholding EPA’s application of GHG emission limits to stationary sources. See Coalition for Responsible Regulation v. EPA, 684 F.3d. 102, 117 (D.C. Cir. 2012), and see the Chapter 6 updates for a more detailed discussion of this decision.

9. EPA’s focus on more than simply CO₂ is supported by the technical literature. While the major contribution to global climate change is from carbon dioxide, other air pollutants – black carbon and tropospheric ozone – also contribute smaller, but still substantial, amounts. The author of a recent article argues that reductions in global warming might actually be achieved faster by making immediate reductions in these pollutants rather than focusing entirely on carbon dioxide reduction, which could take decades to achieve. See Frances C. Moore (2009) “Climate Change and Air Pollution: Exploring the Synergies and Potential for Mitigation in Industrializing Countries” Sustainability 1: 43-54. Available at www.mdpi.com/journal/sustainability. In 2013, the D.C. Circuit vacated EPA’s rule deferring for three years a decision on whether to regulate “biogenic” carbon dioxide – non-fossil-fuel carbon dioxide sources such as ethanol – holding that the agency had not justified its decision to delay action on these sources. See Center for Biological Diversity v. EPA, 722 F.3d 401 (D.C. Cir. 2013).

Add the following note directly above section II on page 568:

NOTE

1. Reversing the previous administration’s decision, EPA issued the tailpipe emissions waiver to California in June 2009, paving the way for the control of mobile source carbon emissions by California, and by other states should they choose to adopt the California standards. In its proposed 2018 rollback of the mobile source fuel efficiency standards, however, EPA has
proposed to rescind the California waiver for greenhouse gas emissions, arguing that the statutory waiver given to California in the Clean Air Act was only meant to extend to pollutants that contribute to the state’s well-known smog problem in the Los Angeles basin. In response, California Governor Jerry Brown announced that “California will fight this stupidity in every conceivable way possible.” Ryen Beene, et al. “U.S. Proposes Easing Auto Mileage Rules, California’s Authority,” Envt. Rptr. (Aug. 2, 2018).