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Case No. S239397

IN THE SUPREME COURT
OF THE STATE OF CALIFORNIA

Deputy

NATIONAL SHOOTING SPORTS FOUNDATION, INC., et al.

Plaintiffs and Appellants,

v.

STATE OF CALIFORNIA,

Defendant and Respondent.

After a Decision by the Court of Appeal, Fifth Appellate District
Case No. F072310
Fresno County Superior Court, Case No. 14CECG00068
The Honorable Donald S. Black, Judge

**APPLICATION FOR LEAVE TO FILE AMICI CURIAE BRIEF IN
SUPPORT OF THE STATE OF CALIFORNIA; PROPOSED BRIEF
OF CALIFORNIA ENVIRONMENTAL LAW PROFESSORS**

Sean B. Hecht (SBN 181502)
UCLA School of Law
405 Hilgard Avenue
Los Angeles, CA 90095
Telephone: (310) 794-5272
Facsimile: (310) 206-1234
hecht@law.ucla.edu

*Meredith J. Hankins (SBN 313687)
UCLA School of Law
405 Hilgard Avenue
Los Angeles, CA 90095
Telephone: (310) 206-2392
Facsimile: (310) 206-1234
hankins@law.ucla.edu

*Attorneys for Amici Curiae California Environmental Law Professors Ann
Carlson, Holly Doremus, Richard Frank, Meredith Hankins, Sean Hecht,
Helen Kang, John Leshy, Albert Lin, Dave Owen, Claudia Polsky, James
Salzman, Daniel Selmy, and Deborah Sivas*

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APPLICATION TO FILE BRIEF OF AMICI CURIAE

TO THE HONORABLE CHIEF JUSTICE OF THE SUPREME COURT
OF THE STATE OF CALIFORNIA:

Proposed amici curiae Ann Carlson, Holly Doremus, Richard Frank, Sean Hecht, Meredith Hankins, Helen Kang, John Leshy, Albert Lin, Dave Owen, Claudia Polsky, James Salzman, Daniel Selmy, and Deborah Sivas make this application to file the accompanying brief in this case pursuant to California Rules of Court, Rule 8.520, subd. (f). Amici are professors engaged in the study and teaching of environmental law and policy. They include professors who have considerable experience working on California and federal environmental and public health regulation. Amici professors have an interest in ensuring the Court properly considers the implications of this case on the ability of the California Legislature to continue enacting laws pursuant to the Legislature's long-recognized police powers, including laws intended to stimulate the development and deployment of cutting-edge technology to adequately protect public health, public safety, and the natural environment.

Their affiliations are listed below to provide context for their interest and their ability to assist the court in deciding this matter.

Ann Carlson
Shirley Shapiro Professor of Environmental Law
UCLA School of Law

Holly Doremus
James H. House and Hiram H. Hurd Professor of Environmental
Regulation
UC Berkeley School of Law

Richard Frank
Professor of Environmental Practice
UC Davis School of Law

Meredith J. Hankins
Shapiro Fellow in Environmental Law and Policy
UCLA School of Law

Sean B. Hecht
Co-Executive Director, Emmett Institute on Climate Change and
the Environment
Evan Frankel Professor of Policy and Practice
UCLA School of Law

Helen Kang
Professor of Law
Director, Environmental Law and Justice Clinic
Golden Gate University School of Law

John Leshy
Distinguished Professor of Law Emeritus
UC Hastings College of the Law

Albert Lin
Professor of Law
UC Davis School of Law

Dave Owen
Professor of Law
UC Hastings College of the Law

Claudia Polsky
Assistant Clinical Professor of Law
Director, Environmental Law Clinic
UC Berkeley School of Law

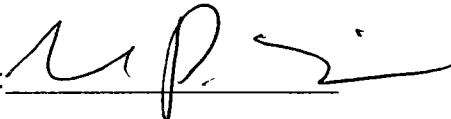
James Salzman
Donald Bren Distinguished Professor of Environmental Law
UCSB Bren School of Environmental Science & Management
UCLA School of Law

Daniel P. Selmi
Fritz B. Burns Professor of Real Property Law
Loyola Law School
Loyola Marymount University

Deborah A. Sivas
Luke W. Cole Professor of Environmental Law
Director, Environmental Law Clinic
Director, Environmental and Natural Resources Law & Policy
Program
Stanford Law School

As amici will be affected by this Court's decision and may assist the Court through their unique perspectives, amici respectfully request the permission of the Honorable Tani Cantil-Sakauye, Chief Justice of the Supreme Court of the State of California, to file this brief.¹

Dated: November 13, 2017

By: 

Sean B. Hecht
Meredith J. Hankins
Counsel for *Amici*
California Environmental Law
Professors

¹ No party or counsel for any party in the pending appeal authored the proposed amicus brief in whole or in part, and no one other than amici, and their counsel of record, made any monetary contribution intended to fund the preparation or submission of the brief.

AMICI CURIAE BRIEF

I. Introduction

The California Legislature has broad authority to pass laws protecting the people of our state. Here, the Legislature chose to address the scourge of gun violence by mandating the use of “microstamping” technology to link spent cartridges with the handgun from which the cartridges were fired. Plaintiffs National Shooting Sports Foundation, Inc., et al. (NSSF) allege the resulting statute is invalid by reason of technological infeasibility, citing a maxim of jurisprudence from the Civil Code that the law “never requires impossibilities.” (Answer Brief on the Merits (ABM) 10.) The Court of Appeal agreed, concluding it would be “illogical to uphold a requirement that is currently impossible to accomplish.” (*Nat’l Shooting Sports Found. v. State* (2016) 6 Cal.App.5th 298, 306, review granted March 22, 2017, No. S239397, 390 P.3d 780.) To the contrary, the Legislature was acting within its well-established authority when it enacted the microstamping statute. The Legislature has broad discretion under its state police powers to regulate for the general welfare. The statutory framework chosen here, which mandated the use of a developing technology in new gun models sold in California, falls squarely within the Legislature’s authority – authority that has been used frequently

to drive innovation through statutes aimed to spur the development and implementation of new technology.

The reasoning adopted by the Court of Appeal would deprive the Legislature of the authority and flexibility it has always possessed to enact statutes that protect the public health and safety of California residents. The Court should reverse the decision of the Court of Appeal.

II. Discussion

A. The California Legislature possesses broad authority to regulate and prohibit commercial activity for the general welfare under its state police powers.

Unlike the federal government, state legislatures are not limited to the enumerated powers listed in the Constitution; rather, they possess inherent “police powers” granting them broad authority to regulate private conduct in a variety of contexts and through a variety of legislative means. (See *Nat’l Fed. of Indep. Businesses v. Sebelius* (2012) 567 U.S. 519, 535-6 [distinguishing reserved state police power from enumerated federal powers].) The police power is the mechanism by which state governments “protect the order, safety, health, morals, and general welfare of society.” (*In re Rameriz* (1924) 193 Cal. 633, 649-50.) This authority is an “indispensable prerogative of sovereignty,” a power this Court has long established is “not to be lightly limited.” (*Miller v. Bd. of Pub. Works of City of Los Angeles* (1925) 195 Cal. 477, 484.) The police power evolves

as society grows more complex, making the need for regulation “more acute.” (*Max Factor & Co. v. Kunsman* (1936) 5 Cal.2d 446, 458.) And the California Legislature is vested with broad discretion to determine “what measures are necessary” to meet its goals in exercising the police power. (*Ex Parte Miller* (1912) 162 Cal. 687, 696.) When the Legislature enacts an otherwise constitutional statute pursuant to its police power, a court may not invalidate the statute unless it has “no reasonable relation to a legitimate purpose accomplished by the enactment.” (*Bronco Wine Co. v. Jolly* (2005) 129 Cal.App.4th 988, 1024, as modified on denial of reh’g (June 20, 2005) [citing *Sligh v. Kirkwood* (1915) 237 U.S. 52, 61].)

The statute at issue here prohibits the sale of new models of semiautomatic pistols that do not comply with the microstamping requirement. (Pen. Code § 31910, subd. (b)(7).) This kind of conditional prohibition on a dangerous activity is a classic exercise of the police power. The authority of a state legislature to regulate the sale and use of private personal and real property to protect public health and safety is long-established and unquestioned. This authority includes broad power to enact laws of a prohibitive nature. Just as the legislature has the authority to regulate under the police power, it also has the power to prohibit.

Among the most frequently tested early subjects of state police power were municipal zoning ordinances enacted pursuant to state

legislative authority. For example, in 1925, this Court heard a challenge to a Los Angeles ordinance prohibiting the construction of any buildings other than residential housing designed for two families or less in a certain part of the city. (*Miller v. Bd. of Pub. Works of City of Los Angeles*, *supra*, 195 Cal. at p. 482.) Of particular interest to the court was that the ordinance did more than regulate the materials or design of buildings, but rather was “purely prohibitive zoning directed solely to use and occupation.” (*Id.* at pp. 483-4.) However, relying on “the well-recognized principle that courts are loath to substitute their judgment as to the necessity for a particular enactment for the legislative judgment as to the need of such enactment with reference to the exercise of the police power,” the court concluded the ordinance was a valid exercise of police power. (*Id.* at pp. 490, 496.) The United States Supreme Court upheld a different part of the same Los Angeles ordinance in a 1927 opinion, affirming the authority of the city to prohibit construction of any private business in a certain section of the city. (*Zahn v. Bd. of Public Works of City of Los Angeles* (1927) 274 U.S. 325, 328.) In upholding the ordinance, the court noted that “[t]he most that can be said is that whether that determination was an unreasonable, arbitrary, or unequal exercise of power is fairly debatable,” and concluded that “[i]n such circumstances, the settled rule of this court is that it will not substitute its judgment for that of the legislative body charged with the primary duty and responsibility of determining the question.” (*Ibid.*)

The deferential standard of review demonstrates the wide latitude the Legislature has to legislate under its police power. It is clearly within a legislature's authority to enact both regulatory and prohibitory statutes for the general welfare – it is what legislatures have done for hundreds of years. The microstamping statute at issue here is no different than many other laws enacted to protect the health and welfare of California citizens. The gun violence epidemic is widely acknowledged as a public health crisis deserving of more attention from medical professionals and legislators alike.² A statute aimed at addressing gun violence falls squarely within the Legislature's police power to address public health and safety. As this Court noted in 1924, “[i]t is a well-recognized function of the Legislature, in the exercise of the police power, to restrain dangerous practices and to

² See, e.g., Bauchner et al., *Death by Gun Violence – A Public Health Crisis*, *Journal of American Medicine* (published online October 9, 2017), <<https://jamanetwork.com/journals/jama/fullarticle/2657417>> (editorial by the Editor in Chief of the *Journal of American Medicine* (JAMA) and the Editors of the eleven specialized JAMA network journals citing fifteen peer-reviewed studies linking gun violence and public health). The editorial concludes:

Guns kill people. More background checks; more hotel, school, and venue security; more restrictions on the number and types of guns that individuals can own; and development of “smart guns” may help decrease firearm violence. But the key to reducing firearm deaths in the United States is to understand and reduce exposure to the cause, just like in any epidemic, and in this case that is guns.

(*Ibid.*)

regulate the carrying and use of firearms and other weapons in the interest of public safety.” (*In re Rameriz, supra*, 193 Cal. at p. 650.)

B. The microstamping statute was enacted under the Legislature’s well-established authority to utilize technology-forcing.

The particular form of legislation chosen here is not a novel one. Legislatures regularly use “technology-forcing” statutes to drive regulated industries to develop new technologies in order to meet strict standards. Legislatures make reasoned predictions about what technologies may be developed based on the existing state of the art and encourage industries to create innovative solutions to societal problems. Technology-forcing statutes are particularly necessary in areas where an industry has little incentive to act independently to address negative externalities, or consequences of private actors’ decisions where the costs are borne by the public at large instead of by participants in market transactions. In the pollution control context, the U.S. Supreme Court has described technology-forcing regulations as “expressly designed to force regulated sources to develop pollution control devices that might at the time appear to be economically or technologically infeasible.” (*Union Elec. Co. v. E.P.A.* (1976) 427 U.S. 246, 257 [discussing the rationale behind certain provisions of the Clean Air Act].) The legislative authority to develop technology-forcing regulations is long-established. Congress has regularly and successfully utilized technology-forcing statutes, implemented through

federal regulations, to drive innovation and protect public health in areas such as the environment, automobile safety, and worker safety. And these efforts have consistently been upheld in the face of legal challenge.³

Perhaps the best example of the necessity of such regulations is the development of standards to reduce automobile tailpipe emissions. Despite growing national concern about the health effects of automobile pollution, automakers were reluctant to develop expensive technologies to reduce tailpipe emissions on their own.⁴ The head of the federal Department of Health, Education, and Welfare – which administered air pollution control regulation before the creation of the Environmental Protection Agency – bemoaned the halting progress in 1967: “the state of the art has tended to

³ See, e.g., *Union Electric Co. v. EPA*, *supra*, 427 U.S. at p. 269 (“Technology forcing is a concept somewhat new to our national experience and it necessarily entails certain risks. But Congress considered those risks in passing the 1970 [Clean Air Act] Amendments and decided that the dangers posed by uncontrolled air pollution made them worth taking. Petitioner's theory would render that considered legislative judgment a nullity, and that is a result we refuse to reach.”); *Society of Plastics Industry, Inc. v. OSHA* (2nd Cir. 1975) 509 F.2d 1301, 1309 (“In the area of safety, we wish to emphasize, the Secretary [of the Occupational Health and Safety Administration (OSHA)] is not restricted by the status quo. He may raise standards which require improvements in existing technologies or which require the development of new technology, and he is not limited to issuing standards based solely on devices already fully developed.”).

⁴ In 1969, the Department of Justice entered into a consent decree with automakers to resolve an investigation into whether the big four automakers had violated antitrust laws by conspiring to delay the development of air pollution control equipment. (*U.S. v. Automobile Mfrs. Ass'n* (C.D. Cal. 1969) 307 F. Supp. 617.)

meander along until some sort of regulation took it by the hand and gave it a good pull. . . . There has been a long period of waiting for it, and it hasn't worked very well." (*International Harvester Co. v. Ruckelshaus* (D.C. Cir. 1973) 478 F.2d 615, 623.) In response, in 1970 Congress adopted strict standards requiring a 90% reduction in emissions for 1975 model year vehicles. (*Ibid.*) Congress explicitly acknowledged that these new standards were "drastic medicine" that were intended to "force the state of the art." (*Id.* [quoting Remarks of Sen. Muskie, 116 Cong. Rec. 32,904, 33,120 (1970)].) Congress also acknowledged that these standards were not achievable using current technology by including an "escape hatch" allowing a single, one-year delay of the standards if the technology had not been developed by 1975. (*Id.* at p. 624.) As a result of these and subsequent increasingly stringent automobile standards, tailpipe emissions of volatile organic compounds and nitrogen oxides decreased more than 95% between 1970 and 2000. (Doremus et al., *Environmental Policy Law* (6th Ed. 2012), *Automobile Emissions and Technology Forcing*, p. 698.) A 2010 academic study concluded that the 1970 tailpipe emission standards drove automakers to develop innovative technologies that they otherwise would not have adopted, precisely because it was impossible to meet the standards with then-existing technologies. (Jaegul Lee et al., *Forcing technological change: A case of automobile emissions control technology*

development in the US, 30 TECHNOVATION 249 (2010) at p. 260.⁵) The researchers noted that technology-forcing has “influential power as the driver of technological innovation and adoption.” (*Ibid.*)

Another example of technology-forcing regulations successfully driving innovation to meet standards considered unattainable with currently-deployed technologies is the New Source Performance Standards (NSPS) for power plants. These standards drove rapid development of flue-gas desulfurization (FGD) technologies to dramatically reduce sulfur dioxide emissions from coal-fired power plants. (See generally Margaret R. Taylor et al., *Control of SO₂ emissions from power plants: A case of induced technological innovation in the U.S.*, 72 TECHNOLOGICAL FORECASTING & SOCIAL CHANGE 697 (2005).⁶) When revising the power plant NSPS in 1979, the EPA was simultaneously challenged by both industry and environmental groups, who argued the standards were too stringent and not stringent enough, respectively. (*Sierra Club v. Costle* (D.C. Cir. 1981) 657 F.2d 298.) Congress had directed the EPA to set “achievable” standards when creating the NSPS, and industry groups argued that the 90 percent sulfur dioxide emission reduction required in the

⁵ Available at:
<<https://www.sciencedirect.com/science/article/pii/S0166497209001746>>.

⁶ Available at:
<<https://www.sciencedirect.com/science/article/pii/S0040162504001465>>.

1979 NSPS had not been adequately demonstrated to be achievable. (*Id.* at p. 356.) The D.C. Circuit rejected the industry’s challenge, concluding that because “the Clean Air Act is a technology-forcing statute, we believe EPA does have authority to hold the industry to a standard of improved design and operation advances” and upholding the EPA’s decision to set the NSPS “at a level that is higher than has been actually demonstrated over the long term.” (*Id.* at p. 364.) While this case largely focused on the sufficiency of the EPA’s evidence of achievability because the statutory provision at issue used the word “achievable,” it also demonstrates the larger point that Congress had the clear legislative authority to direct EPA to set standards that went beyond what had already been “achieved.”

Technology-forcing has also been successfully utilized in California, most notably to address the state’s air pollution problems. The California Legislature passed the Motor Vehicle Pollution Control Act in 1960 – five years before Congress enacted its own Motor Vehicle Air Pollution Act at the national level. (Ann Carlson, *Iterative Federalism and Climate Change*, 103 Nw. U. L. Rev. 1097, 1111 (2009).) Indeed, the first national emission standards for 1968 model year automobiles were identical to the state standards already enacted in California. (*Ibid.*) California’s leadership in outpacing the federal government in setting stringent

automotive emission standards⁷ has not only forced the automotive industry to develop new technology and refine existing technology, but has also iteratively driven national emission standards ever lower. (*Id.* at pp.1109-

⁷ See generally Committee on State Practices in Setting Mobile Source Emission Standards, State and Federal Standards for Mobile-Source Emissions (National Academies Press 2006) ch. 3, Regulation of Emissions from New Mobile Sources, <<https://www.nap.edu/read/11586/chapter/1>>. In particular, this 2006 Committee Report describes California's leadership in forcing technological improvements throughout the 1960s and '70s:

The pattern throughout the decade was consistent; California authorities would establish control requirements and the U.S. government would follow a few years later. For example, California required the control of crankcase emissions (now controlled with the positive crankcase ventilation [PCV] valve) in 1961. California acted again in 1964 by setting the first hydrocarbon (HC) and carbon monoxide (CO) emissions regulations in the nation, which applied to model-year 1966 vehicles. The federal government followed suit in the Motor Vehicle Air Pollution Control Act of 1965 when it adopted both the California crankcase and tailpipe emissions standards for 1968 model-year vehicles. In 1970, Congress moved ahead of California and the federal government process by amending the CAA to require the establishment of regulations to reduce motor vehicle emissions by 90% for model-years 1975 and 1976 vehicles. However, throughout most of the 1970s and the 1980s, California outpaced the federal regulatory process, for example, setting evaporative emissions standards for model-year 1970 vehicles and the first nitrogen oxide (NOx) emission standards for model-year 1972 vehicles. In general, the federal process has continued to lag behind the California process by 1 or more years.

Id. at pp. 90-91.

1119.) Other recent examples at the state level include the California Legislature's use of technology-forcing to drive innovation in low- and zero-emission electric vehicles⁸ and to direct the California Energy Commission to develop technology-forcing energy efficiency standards for appliances and buildings.⁹ In 2012, this Court upheld technology-forcing regulations that a local air district enacted to reduce emissions from architectural coatings. (*American Coatings Association v. South Coast Air Quality Mgmt. District* (2012) 54 Cal.4th 446.) This Court affirmed the authority of the air district to set standards based on "potential or developing technology that will enable compliance with emission limits by the effective date of the regulation," even if the standards may not be achievable when the regulation is enacted. (*Id.* at p. 469.)

NSSF attempts to distinguish air pollution control as more straightforward than other technologies on the basis that "filtering has been practiced for centuries, and pollution control is simply high-technology

⁸ See generally Gustavo Collantes & Daniel Sperling, *The origin of California's zero emission vehicle mandate*, 42 TRANSPORTATION RESEARCH 1302 (December 2008), <<http://www.sciencedirect.com/science/article/pii/S0965856408001195>>.

⁹ See generally *Tracking Progress*, California Energy Commission (updated July 5, 2017), <http://www.energy.ca.gov/renewables/tracking_progress/documents/energy_efficiency.pdf>; see also Gabriel Kahn, *The Quest for Home-Utility Bills of . . . Zero*, Wall Street Journal (Sept. 13, 2016), <<https://www.wsj.com/articles/the-quest-for-home-utility-bills-ofzero-1473818641>>.

filtering.” (ABM 34-5.) It further argues that legal justifications for technology-forcing are applicable only in the environmental context.

(*Ibid.*) NSSF is mistaken on both counts.

First, air pollution control is a highly complex subject, requiring technology far beyond “filtering.” Arguing that technology-forcing regulations are only applicable in the air pollution control context because air pollution technology has not changed for centuries relies on a mistaken premise. Neither of the federal regulations discussed above, for example, involved mere filtering. The FGD technology developed to meet the sulfur dioxide NSPS involves a complex chemical reaction whereby post-combustion flue gas is contacted in a scrubber with a base reagent or “sorbent” that binds the sulfur dioxide for later processing or regeneration. (Taylor et al., *supra*, at p. 703.) Patent activity in the FGD area increased dramatically from fewer than four patents per year to more than seventy-six per year after EPA began developing the NSPS. (*Id.* at p. 710.) The catalytic converter developed to meet the automobile emission standards likewise involves a complicated chemical reaction, and drove a large increase in patent activity. (Lee et al., *supra*, at pp. 251-2, 253-4.) California’s energy efficiency standards have driven decreases in fuel use, driving both energy independence and decreases in per capita greenhouse gas emissions, using a broad range of programs involving residential and

commercial building codes, appliance efficiency standards, HVAC and lighting standards (including a large-scale shift to LED lighting in applications unheard of a decade ago), manufacturing, and agriculture.¹⁰ These examples demonstrate that technology-forcing regulations have been used specifically to require development of complex technologies and dramatic technological innovations, contrary to NSSF's assertions.

Second, technology-forcing regulations have not traditionally been limited to the environmental context. They are used throughout the broader public health and safety arena, including in regulating motor vehicle safety, workplace safety, and other important concerns.

For example, Congress passed the National Traffic and Motor Vehicle Safety Act in 1966 with the public safety purpose to “reduce traffic accidents and deaths and injuries to persons resulting from traffic accidents.” (*Chrysler Corp. v. Dept. of Transportation* (6th Cir. 1972) 472 F.2d 659, 663.) Pursuant to this Act, the National Highway Traffic Safety Administration (NHTSA) enacted a standard requiring the use of “passive

¹⁰ See generally California Public Utilities Commission, *Regulating Energy Efficiency* (2016), <http://www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/News_Room/Fact_Sheets/English/Regulating%20Energy%20Efficiency%200216.pdf>; see also California Energy Commission, *Energy Commission Adopts Lighting Standards to Save Californians More Than \$4 Billion in Electricity Costs* (January 27, 2016), <http://www.energy.ca.gov/releases/2016_releases/2016-01-27_adoption_of_lighting_standards_nr.html>.

restraint devices” (i.e. airbags) in automobiles. (*Id.* at p. 664.) In response to a challenge from automakers, the Sixth Circuit explicitly upheld NHTSA’s authority to issue technology-forcing regulations. (*Id.* at p. 673.) While the court ultimately sided with the automakers on other grounds, the court affirmatively rejected the automakers’ contention that NHTSA’s authority was limited to issuing standards “only on the basis of devices already in existence.” (*Id.* at p. 672.) The court noted that if NHTSA’s authority was limited as the automakers desired, the agency “would have little discretion to accomplish its primary mission of reducing the deaths and injuries resulting from highway accidents” and would be “unable to require technological improvements of any kind unless manufacturers voluntarily made these improvements themselves.” (*Ibid.*) Thus, the Sixth Circuit held that NHTSA was “empowered to issue safety standards which require improvements in existing technology or which require the development of new technology[.]” (*Id.* at p. 673.) In a later case rejecting the Reagan administration’s attempted revocation of the airbag standard, the U.S. Supreme Court noted that “the Motor Vehicle Safety Act was necessary because the industry was not sufficiently responsive to safety concerns” and that Congress “intended that safety standards not depend on current technology and could be ‘technology-forcing’ in the sense of inducing the development of superior safety design.” (*Motor Vehicle Mfrs. Ass’n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.* (1983) 463 U.S. 29,

49.) The airbag example confirms that the authority to design technology-forcing regulations extends beyond the environment to address broader public health and safety concerns. If public safety concerns justify using technology-forcing in the context of automobile safety, surely that same public safety justification extends to regulating guns, which are responsible for roughly the same number of annual deaths as automobile accidents.¹¹

Legislative actions to support safety through technology forcing have extended to other areas as well, such as workplace safety. In a scathing opinion upholding the use of technology-forcing to protect workers' health, the Second Circuit noted that "it must be remembered that we are dealing here with human lives." (*Society of Plastics Industry, Inc. v. OSHA, supra*, 509 F.2d at p. 1308.) In that case, plastics manufacturers challenged a standard promulgated by OSHA to limit worker exposure to a carcinogen, vinyl chloride monomer (VCM). (*Id.* at pp. 1303-5.) Industry argued that it was impossible to meet a 1 part per million VCM exposure standard, but the court concluded that "they simply need more faith in their own technological potentialities," noting that previous claims of "impossibility" to earlier standards had been overcome "in a matter of

¹¹ See Christopher Ingraham & Carolyn Y. Johnson, *How gun deaths became as common as traffic deaths*, Washington Post (December 18, 2015), <<https://www.washingtonpost.com/news/wonk/wp/2015/12/18/how-gun-deaths-became-as-common-as-traffic-deaths>>.