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The Fire Rises: Refining the Pennsylvania Fireworks Law so that Fewer People Get Burned

Sean P. Kraus

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COMMENTS

The Fire Rises: Refining the Pennsylvania Fireworks Law so that Fewer People Get Burned

Sean Philip Kraus*

ABSTRACT

On October 30, 2017, the General Assembly of Pennsylvania passed an act that repealed the state's fireworks law, which had prohibited the sale of most fireworks to Pennsylvanian consumers for nearly 80 years. The law's replacement generally permits Pennsylvanians over 18 years old to purchase, possess, and use "Consumer Fireworks." Bottle rockets, firecrackers, Roman candles, and aerial shells are now available to amateur celebrants for holidays like Independence Day and New Year's Eve. The law also regulates a category of larger "Display Fireworks," sets standards for fireworks vendors, and introduces a 12-percent excise tax on fireworks sales that serves to fund a subsidy scheme for firefighter and EMS training.

This Comment argues that the new fireworks law insufficiently protects consumers. Although people have used fireworks recreationally for hundreds of years, modern consumers

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lack information about the risks associated with them, increasing the chance of fireworks-related injury. As Pennsylvania law has rapidly shifted its approach away from prohibition, the new law must confront the reality that consumers of legal fireworks risk injury at predictable times of the year. Rather than strictly fund firefighter and EMS training, the legislature should implement a Pigouvian tax and subsidy scheme which would strategically provide consumers with information about safe firework use. Additionally, the legislature should cure constitutional defects in the law's definition section and promote fair competition between permanent and temporary vendors. Refining the new law will better promote the dual goals of modern fireworks regulation—facilitating celebration and preventing injury.

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I. INTRODUCTION

It was a sunny Independence Day afternoon at some point in the mid-2000s.¹ The City of Cheery, Pennsylvania was bustling with pyrotechnic activity: some patriotic revelers waited for the start of the big display at Mercywurst College; others temporarily left family picnics to go shopping at Tall Bunyan's Fireworks. Two brothers, Mark and Paul, were doing the latter. They turned off Pear Street, parked in front of the store, and walked inside. Mark, a life-long Pennsylvanian, handed a shopping list to Paul and went browsing the aisles of the "PA-Legal" section of the store. Paul, a Marylander since the late 1980s, presented his out-of-state driver's license to an employee standing guard at a side-room and proceeded past him toward the "good stuff."

Sometime later, Paul exited the store laden with firecrackers, Roman candles, bottle rockets, and aerial shells. Mark, for his part, had purchased some smoke bombs, sparklers, snakes, and fountains. Returning a few blocks to the family picnic, they combined their respective hauls and set about launching fireworks in an amateur display that the whole family still fondly remembers.² Today, of course, *both* brothers can purchase and launch the more exciting kinds of fireworks because of a change in Pennsylvania state law.³ This Comment is about the sudden grant of pyrotechnic privileges that swept Pennsylvania in late 2017.

The problem of launching fireworks and of historic attempts to regulate the activity is that too much of a good thing routinely becomes a bad thing. Fireworks used in excess will cause harm to people and property; yet regulation in excess will fail to stop that harm. These truths conjure no simple answer to the problem of sensible fireworks regulation, but suggest that an effective fireworks law will satisfy twin goals: promoting celebration and protecting the people. These goals are the guiding bounds of this Comment, which surveys the fireworks law of Pennsylvania: a state formerly committed to prohibiting fireworks sales to its residents, but now permitting much of what it formerly prohibited.

The shift from prohibition to permission in Pennsylvania fireworks law did not occur in a vacuum. Rather, this shift is the result of creeping changes in the culture of fireworks use—an activity

1. The scenario in the Introduction to this Comment reflects the law that governed fireworks sales in Pennsylvania between November 30, 2004, and October 30, 2017. See *infra* Part II.D.4.

2. Launching Paul's fireworks was, however, completely illegal. See *infra* Part II.D.

3. See *infra* Part III.A.

largely defined by continuity and tradition—as well as changes in social understanding of what goals fireworks laws should seek to accomplish, and how. As such, this Comment begins with an overview of the history of fireworks and of historical approaches to fireworks laws.⁴ Part II begins with the earliest history of fireworks. It continues by describing the early use of fireworks in Europe and the first attempt at regulating fireworks in England as a means of social control.⁵ Then, after describing the use of fireworks in the early United States and this country's initial lack of fireworks laws,⁶ it examines how fireworks production accidents and user injuries in the late-19th and early-20th centuries led to increased regulation in Pennsylvania, culminating in a general prohibition through the 1939 Fireworks Act.⁷ Finally, Part II examines the weakening commitment to that general prohibition in recent years.

Next, Part III examines the change from Pennsylvania's previous fireworks law to the new law passed at the end of October 2017.⁸ This section pays close attention to how the new law regulates different categories of fireworks—whether novelties, Consumer Fireworks, Display Fireworks, or federally illegal fireworks—in lieu of a general prohibition.⁹ This section also examines the nature of an important social cost of fireworks use, consumer injury, and addresses how the law applies a tax and subsidy scheme to alleviate the social cost of fireworks.¹⁰ This section argues that allocating the subsidy toward providing consumers with fireworks safety information will further reduce injuries in concert with the existing emphasis on EMS and firefighter training.¹¹ Finally, this section addresses a recent constitutional challenge¹² to the 2017 Revised Fireworks Act and argues that the legislature should remedy state-constitutional defects, which pose a threat to the entire regulatory scheme, and should promote fair competition between permanent and temporary fireworks vendors.¹³

Last, Part IV synthesizes the history of fireworks legislation, the current state of Pennsylvania law, and this Comment's sug-

4. *See infra* Part II.

5. *See infra* Part II.B.

6. *See infra* Part II.C.

7. *See infra* Part II.D.

8. *See infra* Part III.A.

9. *See infra* Part III.B.

10. *See infra* Part III.C.

11. *See infra* Part III.C.3.

12. *See* Phantom Fireworks Showrooms, LLC v. Wolf, 198 A.3d 1205 (Pa. Commw. Ct. 2018) (invalidating provisions of the 2017 Revised Fireworks Act related to the sale of fireworks by temporary fireworks vendors).

13. *See infra* Part III.D.

gested changes to the law into an explanation of why effective fireworks regulation, which both promotes celebration and protects consumers, is achievable in the future.¹⁴

II. BACKGROUND: HISTORIC APPROACHES TO FIREWORKS LEGISLATION

Understanding the history of fireworks is necessary to understanding Pennsylvania's attempts at fireworks regulation. This section proceeds chronologically through the approaches to fireworks regulation in England,¹⁵ the early United States,¹⁶ and Pennsylvania.¹⁷ Because of serious injuries in the early 20th century, Pennsylvania eventually adopted an approach of total prohibition on fireworks sales and use.¹⁸ Despite the general application of this fireworks prohibition,¹⁹ a loophole allowed vendors to continue selling to some customers as "wholesalers."²⁰ Ultimately, the legislature's commitment to fireworks prohibition weakened by the beginning of the 21st century.²¹

A. *The Early History of Fireworks*

Alchemists discovered fireworks centuries ago, military commanders adapted them for use in battle, and spectators have long marveled at them in peacetime displays; eventually, they became subject to government regulation in the common law tradition.²² The history of their origin and development is foundational to understanding both their present use in the United States and their legal status in Pennsylvania.

14. *See infra* Part IV.

15. *See infra* Part II.B.

16. *See infra* Part II.C.

17. *See infra* Part II.D.

18. *See infra* Part II.D.1

19. *See infra* Part II.D.2.

20. *See infra* Part II.D.3.

21. *See infra* Part II.D.4.

22. *See generally* ALAN ST. HILL BROCK, A HISTORY OF FIREWORKS (1949) (describing the history of fireworks with emphasis on their development and use throughout the British Empire); GEORGE PLIMPTON, FIREWORKS: A HISTORY AND CELEBRATION (1984) (describing the social history of fireworks in America including attempts to regulate their use by ordinary consumers); SIMON WERRETT, FIREWORKS: PYROTECHNIC ARTS AND SCIENCES IN EUROPEAN HISTORY (2010) (describing the reciprocal relationship between developments in fireworks, philosophy, science, and culture in the Renaissance and Enlightenment eras).

Some mystery obscures the exact time and place of the first discovery of fireworks.²³ Various nations claim to have discovered fireworks first just as they claim black powder or the gun as their own inventions.²⁴ The close relation of the three technologies complicates the question of who discovered fireworks first.²⁵ Regardless, current historical consensus points to China as the first to develop fireworks in the 12th century.²⁶

Gunpowder appeared thereafter in Europe by the 14th century, when its use in European warfare began.²⁷ Firework displays for entertainment started in the context of military victories, religious festivals, and major civic occasions.²⁸ Artillerymen were instrumental in these early professional displays, employing their martial knowledge, technical skill, and specialized equipment for the peacetime purpose of entertaining spectators.²⁹

Meanwhile, a distinction developed between the fireworks of professional displays and those of amateur users.³⁰ In England, for instance, ordinary people used fireworks annually to celebrate the failure of the Gunpowder Plot of 1605, in which Guy Fawkes attempted to blow up the House of Lords.³¹ Amateur fireworks about this time were simple crafts so widely made and used that John Bate, the author of an early pyrotechnic treatise, purposely omitted a recipe for firecrackers, explaining: "It is well known, that every boy can make these, therefore I think it will be but labour

23. See BROCK, *supra* note 22, at 16 (stating that China, India, Arabia, Ancient Greece, Germany, and England present plausible cases for the initial discovery of fireworks).

24. Compare BROCK, *supra* note 22, at 17 (suggesting Berthold Schwartz, a 14th-century German monk, or Friar Bacon, a 13th-century English monk, as the likely discoverers of black powder), with WERRETT, *supra* note 22, at 8 ("That fireworks originated in China is a fact known to all."). For additional perspectives, see generally J. R. PARTINGTON, *A HISTORY OF GREEK FIRE AND GUNPOWDER* (1960); P. K. Gode, *The History of Fireworks in India Between A.D. 1400 and 1900*, in 17 *TRANSACTIONS OF THE INDIAN INSTITUTE OF CULTURE* (1953); Wang Ling, *On the Invention and Use of Gunpowder and Firearms in China*, 37 *ISIS* 160 (1947).

25. See BROCK, *supra* note 22, at 15–17. Black powder, the earliest chemical propellant, logically predates both fireworks and firearms. *Id.* at 19.

26. See WERRETT, *supra* note 22, at 8.

27. *Id.* at 16. Brock states that gunpowder appeared in Europe in the late-13th century. BROCK, *supra* note 22, at 29.

28. See WERRETT, *supra* note 22, at 16–17.

29. WERRETT, *supra* note 22, at 16. Similarly, Brock notes that "for over three centuries . . . the provision of fireworks for occasions of civil public rejoicing was the prerogative of the army." BROCK, *supra* note 22, at 31.

30. WERRETT, *supra* note 22, at 16.

31. See BROCK, *supra* note 22, at 129–32. Other celebratory traditions included hosting large bonfires and burning Fawkes in effigy. *Id.*

lost, to bestow time to describe their making”³² To be sure, professional pyrotechnicians used fireworks of far greater size and complexity: massive aerial shells, arcing rockets, spinning wheels, and great fiery fountains.³³

B. *England: Prohibition and Social Control*

The distinction between well-staged professional fireworks displays and the often rowdy and chaotic usage by amateurs contributed to the regulation of fireworks in 17th-century England.³⁴ Early fireworks laws addressed the civic disruption, injuries to people, and damages to property caused by fireworks accidents and misuse; the goal of these laws was social control.³⁵ Such laws first appeared mid-century and were re-promulgated periodically, but they ultimately failed to change peoples’ celebratory habits, instead creating a thriving market in “bootleg” fireworks.³⁶

In the absence of effective prohibitions, the amateur use of fireworks outside professional displays continued, at its tamest, in the salons and among the various parlor tricks of the wealthy.³⁷ At its rowdiest, the amateur use of fireworks also continued in the hands of the “vulgar” crowd, whose habits were bold and unrestrained by contrast.³⁸ Fireworks even saw use as a means of politi-

32. See John Bate, *The Second Booke, Teaching Most Plainly, and Withall Most Exactly, the Composing of All Manner of Fire-works for Triumph and Recreation*, in *THE MYSTERIES OF NATURE AND ART* (1634) (ebook), <https://bit.ly/2TR0c5x> [<https://perma.cc/8BQR-JDBZ>]. The author has retained all spellings as written in historic sources.

33. See WERRETT, *supra* note 22, at 15–35. Early professional fireworks were technically complex, and some large set-pieces were built by pyrotechnicians to resemble castles and fortresses. *Id.*

34. See, e.g., *id.* at 203. Werrett describes the King’s distaste for “unsanctioned spectacles” including “the popular throwing of squibs, crackers, and rock-ets.” *Id.* at 89.

35. See, e.g., 9 & 10 Will. 3, c. 7 (1697) (Eng.). The preamble for this 1697 fireworks law states:

[M]uch Mischief hath lately happened by the throwing casting and firing of Squibbs Serpentes Rockettes and other Fire-works some Persons having thereby lost their Lives others their eyes others have had their Lives in great Danger and several other Damages have been sustained by many Persons and much more may thereby happen if not speedily prevented

. . . .

Id. This law prohibited the making, selling, and throwing of fireworks, though there was a longstanding exception for the King’s “Master of Ordinance,” who was responsible for the official displays. *Id.*; cf. BROCK, *supra* note 22.

36. BROCK, *supra* note 22, at 138 (discussing a 1666 fireworks ordinance).

37. WERRETT, *supra* note 22, at 203–07.

38. *Id.* As expected, there was animosity between the two groups; one Londoner even asked the Lord Mayor of London to stop permitting official fireworks displays because “[i]t gives ye Rude Rabble Liberty to Doe what they list

cal expression in France, where revolutionary agitators hurled them in protests against the French monarchy.³⁹ Thus, by the 18th century, people from different walks of life participated in a culture of amateur fireworks that developed parallel to officially sanctioned displays by professionals.

C. *United States: An Initial Lack of Regulation*

Writing about the experience of launching Fourth-of-July fireworks as a child in the mid-20th century, the journalist George Plimpton recalled, “The great thing was to do it yourself—just the nudge of a lighted punk to a fuse, a small commitment that seemed such an insignificant act, and yet the result was so decisive and visible.”⁴⁰ In the United States, celebration through the use of fireworks dates from the very independence of this country and endures today.⁴¹

On July 3, 1776, less than a day after the Continental Congress declared independence from England, John Adams wrote in a letter that the occasion “ought to be solemnized with pomp and parade . . . bonfires and illuminations from one end of the continent to the other.”⁴² That first Independence Day, ships in Philadelphia Harbor fired 13-gun salutes, in honor of the 13 colonies, while the people celebrated.⁴³

The early United States generally lacked the fireworks laws of England, notwithstanding that English subjects had been ignoring those laws since the mid-17th century.⁴⁴ American manufacturers of fireworks consequently had great latitude in the goods that they could produce for sale, and consumers benefitted from a wide vari-

. . . to ye Hazard of Peoples life or limbs.” *Id.* (quoting MS Rawlinson D 862, fol. 83 (unpublished manuscript) (Bodleian Library of Oxford University)).

39. WERRETT, *supra* note 22, at 222–23. Not surprisingly, Bastille Day, the French holiday celebrating the storming of a notorious political prison during the French Revolution, remains France’s principal fireworks holiday. PLIMPTON, *supra* note 22, at 175.

40. See PLIMPTON, *supra* note 22, at 9.

41. *Id.* at 256–59. Cf. BROCK, *supra* note 22, at 128–29. Even Brock, an Englishman, had to admit that “undoubtedly a greater total quantity of explosive material is expended [on the Fourth of July] than in any other national celebration.” *Id.*

42. See PLIMPTON, *supra* note 22, at 256.

43. *Id.* at 257. Indeed, Plimpton notes that there was even a small fireworks display in Philadelphia, with an opening and conclusion of 13 rockets, fired “from the Commons, a large field west of Sixth Street from Chestnut to Spruce.” *Id.* at 259.

44. BROCK, *supra* note 22, 128–29. Brock opines that there were few fireworks laws at all in 19th-century America. *Id.*

ety of amusements from which to choose.⁴⁵ Nevertheless, this early unregulated period saw numerous fireworks accidents, both among manufacturers and amateur users, which the law ultimately sought to address.⁴⁶

Accidents and injury were the immediate cause of stricter American fireworks laws in the early- to mid-20th century.⁴⁷ Individual cities first took steps to remedy the situation with local ordinances.⁴⁸ Fireworks legislation might also apply state-wide; a 1925 fireworks law from Michigan restricted the sale of firecrackers more than two inches in length and half an inch in diameter, crackers containing dynamite or picric acid, skyrockets, and Roman candles of more than ten shots.⁴⁹ The public safety, rather than the concerns for order and social control that prompted earlier fireworks laws in Europe, dominated the push for stricter laws in Pennsylvania.⁵⁰

D. *Pennsylvania: Injuries Inspire Action*

Early examples of accidents in Pennsylvania fireworks factories suggest an industry fraught with dangers that mirrored the plight of consumers. An 1882 accident in Chester claimed the lives of 14 and injured 70.⁵¹ In April 1904, seven workers died in Priceburg, and in June of that year, 20 workers lost their lives at a Philadelphia fireworks factory.⁵² Three died in a 1926 Allentown production accident.⁵³ Finally, in 1930, a major fireworks accident occurred in Devon that, in view of a contemporary report, likely remained long in the public memory:

At least fifteen persons were killed, more than a score of others are dying, and hundreds are suffering from burns and bruises. The initial explosion was heard for 80 miles around the countryside . . . the concussion was so great that it derailed and partly wrecked a passing train and rained down a cloud of flaming deb-

45. PLIMPTON, *supra* note 22, at 12–14. Plimpton recounts how fireworks companies did business through colorful mail-order catalogues, supplying fireworks for celebration on holidays like New Year's Eve and Independence Day. *Id.* Children themselves selected items that looked interesting, which their parents could purchase at reasonable prices. *Id.*

46. *See infra* Part II.D.

47. BROCK, *supra* note 22, 128–29.

48. *Id.* at 178.

49. BROCK, *supra* note 22, at 179.

50. *See infra* Part II.D.1 and notes 74, 81.

51. BROCK, *supra* note 22, at 176.

52. *Id.* at 177.

53. *Id.*

ris which fired several houses in the town a quarter of a mile away. Half a dozen minor explosions quickly followed.⁵⁴

Such regular and occasionally apocalyptic accidents suggest that fireworks manufacturers did not yet have the robust safety standards that later laws would establish.⁵⁵

Amateur users also faced significant safety hazards. Fireworks in the early-20th century were considerably more dangerous than those in use today; for instance, the largest firecrackers of the time were “a foot-and-a-half-long” and “went off with a blast that shivered the leaves on the trees for an acre around.”⁵⁶ Ironically, because of such dangerous fireworks, “nearly as many people [have] died celebrating independence—around four thousand over the years—as actually died fighting in the War of Independence itself.”⁵⁷ Nationwide between 1903 and 1915, some 1,862 people were killed and over 42,000 injured while using fireworks on the Fourth of July.⁵⁸

Pennsylvania followed the paradigm of much of the United States in leaving fireworks largely unregulated until the early-20th century, when the General Assembly passed two state-wide fireworks laws in 1911, one regulating the sale and manufacture of fireworks (“1911 Sale and Mfg. Act”)⁵⁹ and the other their use by consumers (“1911 Consumer Act”).⁶⁰ The 1911 Consumer Act⁶¹ prohibited the use of fireworks containing high explosive material (such as dynamite) and firecrackers of extreme dimensions, as both

54. *Id.* at 177–78.

55. *See infra* Part III.D.1. *See also* 27 C.F.R. §§ 555.201–.224 (2014) (discussing federal storage standards for manufacturers of various explosives, including fireworks).

56. PLIMPTON, *supra* note 22, at 194.

57. *Id.* The holiday garnered the epithets “Bloody Fourth” and “Carnival of Lockjaw” as a result of the many deaths and injuries. *Id.*

58. BROCK, *supra* note 22, at 178 (citing then-available American Medical Association statistics). A grass-roots safety movement called the “Safe and Sane Fourth” had some success in reducing injuries between 1909 and 1912. *Id.* In 1909, 215 deaths were recorded, 131 were recorded in 1910, 57 deaths were recorded in 1911, and 41 were recorded in 1912; injuries across the same period dropped from 5,002 to 947. *Id.* The general problem of injury continued, however. *Id.*

59. Act of June 1, 1911, 1911 Pa. Laws 554, 554–55 (1911) (“To restrain and regulate the sale and manufacture of certain fire-crackers, fireworks, and certain explosive materials used in canes, cannons, pistols, or any toy; and providing penalties for the violation thereof.”).

60. Act of June 1, 1911, 1911 Pa. Laws 542 (1911) (“To regulate the use of firecrackers, fireworks, blank cartridges, pellets, tablets, et cetera, in any county in this Commonwealth and providing penalties for the violations thereof.”).

61. Act of June 1, 1911, 1911 Pa. Laws 542 (1911).

made injury to consumers more likely.⁶² The 1911 Sale and Mfg. Act,⁶³ meanwhile, addressed the corresponding conduct of manufacturers and vendors of such dangerous fireworks, prohibiting the production of firecrackers with extreme dimensions and the use of high explosive compounds in any fireworks production.⁶⁴ The emphasis on safety is apparent even in these early state laws which fell short of a complete prohibition on fireworks.

In 1921, another law (“1921 Cities Act”) gave Pennsylvania cities the power to regulate the sale and use of fireworks as they saw fit.⁶⁵ The 1921 Cities Act gave localities the flexibility to set their own fireworks policy in the absence of a state-wide prohibition.⁶⁶ The effect of local laws, however, was probably small: if a town prohibited fireworks within its borders, then consumers would simply leave town to purchase them on the black market.⁶⁷ Legislation of greater scope would be necessary to make a real difference in safety.

1. *Toward Prohibition for Public Safety*

The push for a comprehensive fireworks law in Pennsylvania began in the early 1930s as the safety concerns of legislators and

62. 1911 Pa. Laws at 554–55. The legislators prohibited firecrackers of specific dimensions, including: “any firecracker over six inches in length . . . over three and one-half to six inches in length over three-quarters of an inch in diameter . . . [or] to the length of three and one-half inches in length, over one inch in diameter . . .” *Id.* at 555. Specific high explosives, including picric acid, picrates, and dynamite were prohibited in fireworks as well. *Id.* at 554.

63. Act of June 1, 1911, 1911 Pa. Laws 554, 554–55 (1911).

64. 1911 Pa. Laws 542. Significantly, the legislature added a provision: “this act shall not interfere with the manufacture and sale of legitimate firearms or firecrackers or fireworks.” *Id.* at 555. Thus, the legislature preserved much of the existing business of fireworks vendors and, within reason, the amusements of amateur fireworks users.

65. Act of May 10, 1921, No. 204, 1921 Pa. Laws 430 (1921) (“Authorizing the cities of this Commonwealth to regulate or prohibit and prevent the use and sale of fireworks, firecrackers, sparklers, and other pyrotechnics and the unnecessary firing and discharge of firearms in or into the highways or other public places of such cities.”).

66. *Id.*

67. See BROCK, *supra* note 22, at 128–29. Brock notes that although “[s]ome cities prohibit the sale of fire-crackers by local statute,” the ultimate result is “that the civic boundaries are ringed by temporary roadside firework stalls, set up to supply public demand.” *Id.* Such “bootleg dealers,” for Brock, invite a striking comparison with the period of Prohibition. *Id.* at 178. Brock’s point is that the tendency for laws prohibiting fireworks to create black markets, rather than end the use of fireworks, demonstrates that prohibitive laws are ineffective in achieving their aims. *Id.*

their constituents intensified.⁶⁸ This push succeeded with the passage of Act of May 15, 1939 (“1939 Fireworks Act”),⁶⁹ upon which the current fireworks law is still largely based.⁷⁰

The House bill that eventually became law originated in a proposal by the Shippensburg, Pennsylvania chapter of the American Legion; military veterans likely supported its passage.⁷¹ Fireworks legislation also had support among civic groups representing women, medical professionals, and people disabled by fireworks injuries.⁷² Many newspapers⁷³ weighed in on the side of the bill, as did ordinary people who believed the bill would protect Pennsylvanians, especially children, from further injury.⁷⁴ Undoubtedly,

68. 1939 PA. LEGIS. J. 2567 (May 4, 1939) (statement of Sen. Shapiro) (emphasizing his personal involvement in the push for fireworks legislation since 1933).

69. Act of May 15, 1939, 1939 Pa. Laws 134, 134–36 (repealed 2017).

70. Compare Act of May 15, 1939, No. 65, 1939 Pa. Laws 134, 134–36 (repealed 2017) (“Relating to fireworks; defining fireworks; prohibiting the sale, offering for sale, or exposing for sale and use of fireworks, except in certain cases; authorizing . . . permits for fireworks displays . . . ; imposing duties on the Pennsylvania Motor Police, sheriffs, police officers, and constables; and providing penalties.”), with Act of October 30, 2017, No. 43, 2017 Pa. Laws 672 (codified at 72 P.S. §§ 9401–9416 (LEXIS through 2018 Reg. Sess. Acts 1–41, 43–68, 70–76)) (“providing for fireworks”).

71. 1939 PA. LEGIS. J. 1554 (Apr. 18, 1939). The sound of random fireworks would have awoken unpleasant memories for some veterans. See JEAN SHEPHERD, IN GOD WE TRUST: ALL OTHERS PAY CASH 125 (Dolphin Books 1972) (1966).

The bill that became law was H.B. 305, 1939 Gen. Assemb. (Pa. 1939). Another bill, S.B. 22, 1939 Gen. Assemb. (Pa. 1939), would have allowed a broader prohibition. See also 1939 PA. LEGIS. J. 2568–69 (May 4, 1939) (statement of Sen. Dent). Senator Dent stated:

I don’t care whether [S.B. 22] passes or not, but I do want all of you here to believe me when I say I was one of the youngsters that grew up during your prohibition era in these United States. I know some of the evils of prohibition in anything, whether it is fireworks or liquor or anything else.

Id. at 2568.

72. 1939 PA. LEGIS. J. 1550 (Apr. 18, 1939) (statement of Rep. Tahl). These groups included the Pennsylvania Association for the Blind, Women’s Clubs of Pennsylvania, Pennsylvania Working Home for the Blind, Hospital Association of Pennsylvania, Philadelphia Medical Society, Chestnut Hill League of Women Voters, and Philadelphia Federation of Women’s Clubs. *Id.*

73. 1939 PA. LEGIS. J. at 1549 (statement of Rep. Ominsky) (opining that all the Philadelphia newspapers wanted the bill to pass); cf. 1939 PA. LEGIS. J. 2427 (May 3, 1939) (statement of Sen. Woodward). Because the newspapers were hounding him, Woodward coolly admitted, “I am going to take any position I can to get a fireworks bill, no matter how bad it is,” despite his opposition the previous session. *Id.*

74. 1939 PA. LEGIS. J. at 1549 (statement of Rep. Tahl) (“[T]his is a very important bill, a bill on which the lives and health of the children of Pennsylvania depend The people of Pennsylvania know what it is all about, only the lobbyists and the manufacturers of fireworks . . . desire to delay this matter.”).

public sentiment in favor of fireworks regulation was “extremely alive” in 1939.⁷⁵

For several legislative sessions, the lobbying activities of fireworks manufacturers and the spirited resistance of a vocal minority of legislators delayed the law’s passage.⁷⁶ Defending their constituents’ celebratory use of fireworks from excessive regulation in pursuit of safety, the bill’s opposition lambasted the newspapers for meddling in the legislative process⁷⁷ and the bill’s proponents for their lack of commercial foresight.⁷⁸ Yet the final passage of the law was overwhelming.⁷⁹ No legislators seemed troubled, however, that the new law continued to permit fireworks sales to out-of-state customers.⁸⁰ Rather, concerns for the safety of Pennsylvanians, both children and adults, dominated floor debates about the law and its likely effects.⁸¹

75. *Id.* at 2426 (May 3, 1939) (statement of Sen. Reed).

76. *Id.* Senator Reed accused the bill’s opposition of trying to “juggle [it] around” in committee so that it would not be passed until the next year. *Id.*

77. *E.g.*, 1939 PA. LEGIS. J. 1549 (Apr. 18, 1939) (statement of Rep. Andrews). Andrews read that the Philadelphia Inquirer had claimed to have forced H.B. 305 to the floor for a vote. *Id.* His reply was that “newspaper men so seldom get into the Legislature that they are privileged to run it by remote control.” *Id.* Senator Cavalcante was not so circumspect; he called the Inquirer the “cess-pool of the State of Pennsylvania” and refused to be “stampeded” by its owner, Moses Annenberg, of whom he evidently had a low opinion. *Id.* at 2570 (May 4, 1939) (statement of Sen. Cavalcante).

78. *See id.* at 1604 (Apr. 19, 1939) (statement of Rep. Trout). Representative Trout argued that the law should not apply in 1939 because fireworks manufacturers in Lancaster County would be unable to sell their stock. *Id.* Senator Haluska called S.B. 22 “UnAmerican and UnDemocratic” because of its severe commercial implications for fireworks manufacturers. *Id.* at 2567 (May 4, 1939) (statement of Sen. Haluska). Further, he claimed the legislation was an overreaction because only three deaths in Pennsylvania were attributable to fireworks the previous year, while 148 were attributable to various amateur sports. *Id.* *But see id.* at 2569 (May 4, 1939) (Statement of Sen. Sipe) (arguing the law would help the fireworks industry because consumers would attend professional displays rather than purchase bootleg fireworks).

79. *See id.* at 1605 (Apr. 19, 1939). H.B. 305 passed the House 169 to 8, with “no” votes from Representatives Achterman, Andrews, Bohn, Rothenberger, Royer, Trout, Wilson, and Wood. *Id.* On May 8, 1939, it passed the Senate with only Senators Cavalcante and Haluska voting “no.” *Id.* at 2769 (May 8, 1939).

80. *See infra* Part II.D.2–3.

81. *See, e.g.*, 1939 PA. LEGIS. J. at 1550 (Apr. 18, 1939) (statement of Rep. Ominsky) (discussing the need to keep children safe); *id.* at 1553 (statement of Rep. Tahl) (noting 300 Philadelphia children had been injured in previous year); *id.* at 1605 (Apr. 19, 1939) (statement of Rep. Tahl) (“The people of Pennsylvania are pleading with you to pass this bill, and the kiddies of Pennsylvania are pleading with you . . .”).

2. *The 1939 Fireworks Act*

The 1939 Fireworks Act⁸² regulated fireworks in Pennsylvania for nearly 80 years before its repeal and substitution in October 2017.⁸³ The law operated as a general prohibition on the purchase and use of fireworks by ordinary consumers.⁸⁴ However, specific exceptions to the general prohibition allowed Pennsylvania vendors to sell fireworks and consumers to purchase and use fireworks in statutorily defined situations.⁸⁵

The law began with a broad definition of “fireworks” that attempted to encompass and prohibit all fireworks known at the time of its passage.⁸⁶ Caps for toy pistols were the sole exclusion from

82. Act of May 15, 1939, 1939 Pa. Laws 134, 134–36 (1939).

83. Act of October 30, 2017, No. 43, 2017 Pa. Laws 672 (repealing Act of May 15, 1939, No. 65, 1939 Pa. Laws 134, 134–36 (1939)) (enacting H.B. 542, 2017 Gen. Assemb. (Pa. 2017)). The new statutory scheme for fireworks passed mostly unnoticed among other components of the 2017 state budget. *See, e.g.*, Jan Murphy, *A Dozen Ways Pa.’s 2017–18 State Budget May Impact Your Life*, PENNLIVE (Oct. 27, 2017), <https://bit.ly/2HfLnqy> [<https://perma.cc/8F37-JGNF>]. The muted reaction in the press to the end of the general prohibition on Consumer Fireworks contrasts markedly with the coverage of 80 years ago, which had strongly favored prohibition. *Compare, e.g., Pass the Fireworks Bill!*, PHILA. INQUIRER, Apr. 25, 1939, at 10, with Patricia Madej, *New Pennsylvania Fireworks Law Means You Can Think Bigger than Sparklers on New Year’s Eve*, INQUIRER (Dec. 29, 2017), <https://bit.ly/2GtzSvk> [<https://perma.cc/W5RM-QSWG>].

84. *See* Act of May 15, 1939, No. 65, 1939 Pa. Laws 134, 134–36 (1939).

85. *Id.* at 135–36.

86. *Id.* at 134–35. The act defined “fireworks” as:

[A]ny combustible or explosive composition or . . . any article prepared for the purpose of producing a visible or an audible effect by combustion, explosion, deflagration or detonation, [including] blank cartridges and toy cannons in which explosives are used, the type of balloons which require fire underneath to propel the same, firecrackers, torpedoes, skyrockets, Roman candles, Daygo [sic] bombs, sparklers or other fireworks of like construction, and any fireworks containing any explosive or flammable compound or any tablets or other device containing any explosive substance.

Id. Many of these devices are far from typical fireworks. For instance, the “balloons” described are made from dry-cleaning bags and achieve flight from a tin of burning chafing-dish fuel suspended underneath. *See* WILLIAM GURSTELLE, BACKYARD BALLISTICS: BUILD POTATO CANNONS, PAPER MATCH ROCKETS, CINNATI FIRE KITES, TENNIS BALL MORTARS, AND MORE DYNAMITE DEVICES 121 (Chi. Rev. Press 2001). Similarly, the “toy cannon” described refers to a “carbide cannon,” which reacts water and calcium carbide to produce acetylene gas, ignites the gas with a spark, and produces a loud report. *Id.* at 131.

In *Commonwealth v. Bristow*, 138 A.2d 156 (Pa. Super. Ct. 1958), a Pennsylvania seller of carbide canons was prosecuted under the Fireworks Act. *Id.* at 158. He argued, albeit unsuccessfully, that the Act’s definition of fireworks was unconstitutionally overbroad. *Id.* at 158. The Superior Court upheld the 1939 Act’s broad definition of fireworks and echoed the legislature’s earlier concerns about the safety of children. *Id.* at 159.

this definition; the Act explicitly permitted their sale and use.⁸⁷ Blank cartridges for firearms, while within the definition of fireworks, were nonetheless permitted in the contexts of the theater, sporting events, and activities by military organizations.⁸⁸ The 1939 Fireworks Act otherwise carved out three scenarios in which fireworks were permitted: (1) industrial purposes like quarrying; (2) signaling purposes on the railroad; and (3) display purposes under a municipal permit.⁸⁹

Vendors could still sell fireworks to customers who possessed a display permit from the local municipality.⁹⁰ Before permit seekers received approval, the municipality (often through its fire chief) had to determine that the display would not present a danger to people or a hazard to property.⁹¹ In addition, permit seekers had to post a bond of at least \$500 against injuries and damages that might result from the scheduled fireworks display.⁹² After receiving approval, the permit holder could then purchase and use fireworks for the authorized display only.⁹³ Permits were valid for one display on a specific date and were not transferrable to another person,⁹⁴ though a later “rain-check” provision allowed some flexibility in the date of the display.⁹⁵ After an amendment to the law in 1956, fireworks could also be purchased for agricultural purposes such as bird and animal pest control.⁹⁶

3. *The Wholesale-Shipment Exception*

Vendors, unable to sell their wares to Pennsylvanians, otherwise sold fireworks through the 1939 Fireworks Act’s “wholesale-shipment” exception, through which sales of Consumer Fireworks intended for immediate shipment out-of-state were permitted.⁹⁷

The Act’s definition of “fireworks” even encompassed model rocketry. *See* Official Opinion No. 104, 1958 Op. Att’y Gen. Pa. 162 (Apr. 30, 1958), <https://bit.ly/2BEEgTV> [<https://perma.cc/5CFA-XDM2>]. The Pennsylvania Attorney General issued an opinion letter stating that firing model rockets without a display permit would be a violation of the fireworks law, subject to prosecution. *Id.* In the early 1970s, the legislature remedied the situation by passing a separate law specifically regulating model rockets. *See* 35 P.S. §§ 1281–1289 (1970).

87. Act of May 15, 1939, No. 65, 1939 Pa. Laws at 135.

88. *Id.* at 136.

89. *Id.* at 135–36.

90. *Id.* at 135.

91. *Id.*

92. *Id.*

93. *Id.*

94. *Id.*

95. *See* Act of June 18, 1941, No. 70, 1941 Pa. Laws 132 (1949).

96. *See* Act of Feb. 10, 1956, No. 325, 1955 Pa. Laws 1033–34 (1956).

97. Act of May 15, 1939, No. 65, 1939 Pa. Laws 134, 135–36 (1939).

This provision of the 1939 Fireworks Act led to a strange loophole: Pennsylvania fireworks vendors, ostensibly selling wholesale to remote out-of-state customers, frequently sold to anyone who claimed not to be a resident of Pennsylvania and who promised immediately to leave the state with what he bought.⁹⁸ The loophole remained until the Superior Court, in *Commonwealth v. Hollenbeck*,⁹⁹ clarified the meaning of the statutory language “shipped directly out of state.”¹⁰⁰

In *Commonwealth v. Hollenbeck*, the defendant was a fireworks vendor caught in a sting operation when he sold fireworks at his store to New York police officers who were cooperating with Pennsylvania authorities.¹⁰¹ The trial court convicted the defendant under the 1939 Fireworks Act and fined him \$100, and the defendant appealed this conviction, arguing that the sale was legitimate because he had sold the fireworks “wholesale . . . to be shipped directly out of state,” just as the Act permitted.¹⁰² Although the New York officers really were from out-of-State, as they had told the defendant before he sold them fireworks, the Superior Court decided that the sale was not a wholesale shipment of the kind that the 1939 Fireworks Act permitted.¹⁰³ Citing precedent from the Eastern District of Pennsylvania¹⁰⁴ and from other states’ courts,¹⁰⁵ the Superior Court affirmed the defendant’s conviction.¹⁰⁶ The Superior Court reasoned that

[t]he [1939 Fireworks Act] was adopted by the legislature to prohibit the sale of fireworks in Pennsylvania, except to those possessing a valid permit therefor. To allow a resident wholesaler to sell fireworks to non-residents within Pennsylvania would not

98. See *Commonwealth v. Hollenbeck*, 614 A.2d 1212, 1213 (Pa. Super. Ct. 1992).

99. *Commonwealth v. Hollenbeck*, 614 A.2d 1212 (Pa. Super. Ct. 1992).

100. Act of May 15, 1939, No. 65, 1939 Pa. Laws at 135–36 (“Nothing in this act shall be construed to prohibit any resident wholesaler, dealer or jobber to sell at wholesale such fireworks as are not herein prohibited, or the sale of any kind of fireworks, provided the same are to be shipped directly out of state . . .”).

101. *Hollenbeck*, 614 A.2d at 1213.

102. *Id.* at 1214.

103. *Id.* at 1216.

104. *Id.* at 1214–15 (citing *United States v. Spiezio*, 523 F. Supp. 264 (E.D. Pa. 1981) (discussing the Pennsylvania Fireworks Law of 1939)).

105. *Id.* at 1215 (citing *Hill v. State*, 488 N.E.2d 709, 710–11 (Ind. 1986) (holding the phrase “shipped directly out of state” precludes fireworks being sold as to place them in “general distribution”)); see also *id.* at 1216 (citing *Cornellier Fireworks Co. v. St. Croix Cty.*, 349 N.W.2d 721 (Wis. 1984) (holding signed statement from buyer agreeing to transport fireworks out of state was not delivery out of state, but a “sham”)).

106. *Hollenbeck*, 614 A.2d at 1217.

achieve the legislative purpose. The non-resident purchaser could easily give or resell the purchased fireworks to Pennsylvania residents and, thus, defeat the clear intent of the legislature. Such a result would be absurd.¹⁰⁷

The Superior Court held that the phrase “shipped directly out of state”¹⁰⁸ meant that a vendor must “ensure the delivery of fireworks, which have been sold, to an out-of-state destination by the shipment of such goods from Pennsylvania to the out-of-state destination.”¹⁰⁹ Thus, the *Hollenbeck* decision closed the wholesale-shipment loophole and limited, for a time, further storefront sales of Consumer Fireworks to out-of-state customers.

4. *Commitment to Prohibition Weakens*

The general prohibition on fireworks sales weakened across the latter half of the 20th century.¹¹⁰ By 2004, small devices commonly understood to be fireworks (such as sparklers, ground-based fountains, and toy caps) were no longer within the amended law’s definition of “fireworks” and were available for sale to Pennsylvanians.¹¹¹

In 2004, the Pennsylvania General Assembly also amended the 1939 Fireworks Act to reintroduce storefront sales of Consumer Fireworks to non-residents.¹¹² An amendment to the 1939 Fireworks Act eliminated the word “shipped” and added the word “transported” in the wholesale-exception clause, undermining the holding in *Hollenbeck* which had narrowly construed the word “shipped” in the original Act.¹¹³ The sale of fireworks to out-of-

107. *Id.*

108. Act of May 15, 1939, No. 65, 1939 Pa. Laws 134, 136 (1939).

109. *Hollenbeck*, 614 A.2d at 1217.

110. See Act of June 24, 1959, No. 111, 1959 Pa. Laws 486 (1959) (amending Act of May 15, 1939, No. 65, 1939 Pa. Laws 134 (1939)). For instance, carbide cannons were no longer within the definition of fireworks. Compare Act of June 24, 1959, with *Commonwealth v. Bristow*, 138 A.2d 156, 158–59 (Pa. Super. Ct. 1958). See also Act of November 9, 1973, No. 112, 1973 Pa. Laws 335 (1973) (amending Act of May 15, 1939, No. 65, 1939 Pa. Laws 134 (1939)). This amendment added “sparklers” to the list of items that were not within the law’s definition of fireworks. *Id.* at 335.

111. See Act of Nov. 30, 2004, No. 204, 2004 Pa. Laws 1598 (2004) (amending Act of May 15, 1939, No. 65, 1939 Pa. Laws 134 (1939)).

112. *Id.* at 1599.

113. Compare Act of Nov. 30, 2004, No. 204, 2004 Pa. Laws 1598, 1599 (amending Act of May 15, 1939, No. 65, 1939 Pa. Laws 134 (1939)) (“Nothing in this act shall be construed to prohibit any licensed facility from selling any consumer fireworks or the year-round sale of any kind of consumer fireworks to out-of-State residents whose status is verified . . . provided the same are to be transported directly out of state . . .”), with *Hollenbeck*, 614 A.2d at 1215.

state residents, a practice that the *Hollenbeck* court had described as “absurd,” thus gained explicit legislative approval.¹¹⁴ Significant cracks, therefore, were appearing in a legislative scheme originally designed to prevent fireworks injuries through a complete prohibition on fireworks.¹¹⁵

III. ANALYSIS

Pennsylvania’s new fireworks law, enacted in late 2017 (“2017 Revised Fireworks Act”), represents a sweeping change to fireworks regulation after nearly 80 years of prohibition.¹¹⁶ Much of the innovation of the 2017 Revised Fireworks Act derives from its permissive structure,¹¹⁷ which establishes four distinct categories of fireworks that the Act purports to regulate.¹¹⁸ Meanwhile, the major social cost of fireworks use, injury to people,¹¹⁹ has changed in character over time. The new law attempts to address these changing social costs through a tax and subsidy scheme.¹²⁰ The subsidy component of this scheme, however, would be more effective at reducing fireworks-related injuries were the state legislature to subsidize preventative in addition to remedial efforts.¹²¹ Finally, in view of the constitutional challenge to the 2017 Revised Fireworks Act,¹²² which has invalidated the Act’s provisions regulating the sale of fireworks by temporary vendors, the state legislature should remedy constitutional defects in the law and seek to promote fair competition between permanent and temporary fireworks vendors.¹²³

A. *The 2017 Revised Fireworks Act*

The 1939 Fireworks Act was finally repealed by the state legislature in October 2017.¹²⁴ With the simultaneous introduction of

114. See Act of Nov. 30, 2004, No. 204, 2004 Pa. Laws at 1598.

115. See *supra* Part II.D.1.

116. Act of October 30, 2017, No. 43, 2017 Pa. Laws 672 (2017) (codified at 72 P.S. §§ 9401–9416 (LEXIS through 2018 Reg. Sess. Acts 1–41, 43–68, 70–76)).

117. See *infra* Part III.A.

118. See *infra* Part III.B.

119. See *infra* Part III.C.1.

120. See *infra* Part III.C.2.

121. See *infra* Part III.C.3.

122. See *Phantom Fireworks Showrooms, LLC v. Wolf*, 198 A.3d 1205 (Pa. Commw. Ct. 2018)

123. See *infra* Part III.D.

124. See Act of October 30, 2017, No. 43, 2017 Pa. Laws 672 (2017) (repealing Act of May 15, 1939, No. 65, 1939 Pa. Laws 134, 134–36 (1939)) (enacting H.B. 542, 2017 Gen. Assemb. (Pa. 2017)).

the 2017 Revised Fireworks Act,¹²⁵ Pennsylvania residents recovered the privilege of purchasing most fireworks after nearly 80 years of prohibition. The 2017 Revised Fireworks Act contrasts with the 1939 Fireworks Act in that it is permissive rather than prohibitive; it generally permits the sale and use of fireworks subject to its regulatory scheme.¹²⁶

B. Four Categories of Fireworks

The 2017 Revised Fireworks Act classifies fireworks using established industry standards from the American Pyrotechnics Association (APA).¹²⁷ Four categories of fireworks emerge in the Act, each subject to a different level of regulation.

1. Novelties: The Small Stuff

The 2017 Revised Fireworks Act permits the sale, possession, and use of “novelties,” such as “ground and hand-held sparklers” and “toy caps.”¹²⁸ This category of fireworks essentially mirrors what Pennsylvanians could purchase immediately before the law changed.¹²⁹ However, strictly speaking, novelties are an exemption from the definition of Consumer Fireworks.¹³⁰ Thus, the excise tax on Consumer Fireworks does not apply to novelties,¹³¹ and while some of the use restrictions on Consumer Fireworks apply to “sparkling devices,”¹³² there is no penalty in the new law for the misuse of “novelties” specifically.¹³³

125. Act of October 30, 2017, No. 43, 2017 Pa. Laws 672 (2017) (codified at 72 P.S. §§ 9401–9416 (LEXIS through 2018 Reg. Sess. Acts 1–41, 43–68, 70–76)).

126. *Compare* Act of May 15, 1939, No. 65, 1939 Pa. Laws 134, 134–36 (1939) (“It shall be unlawful for any person . . . to offer for sale . . . or explode any fireworks . . .”), *with* 72 P.S. § 9404 (“A person who is at least 18 years of age and meets the requirements of this article may purchase, possess, and use consumer fireworks.”).

127. *See, e.g.*, 72 P.S. § 9401 (“[A]nd complies with the provisions for ‘consumer fireworks’ as defined in APA 87-1 or any successor standard . . .”); *see also* AM. PYROTECHNICS ASS’N, APA STANDARD 87-1 (2003). The American Pyrotechnics Association is a group that lobbies for the Consumer Fireworks industry. *See Mission*, AM. PYROTECHNICS ASS’N, <https://bit.ly/2XV62Fb> [<https://perma.cc/6E6Y-XQ92>]. For discussion of whether the incorporation of APA standards into the definition of “consumer fireworks” is a permissible delegation of legislative authority under the Pennsylvania State Constitution, *see infra* Part III.D.2.

128. 72 P.S. § 9401; *see also* APA STANDARD 87-1 § 3.2.

129. *See supra* Part II.D.4.

130. 72 P.S. § 9401 (distinguishing consumer fireworks from novelties).

131. *Id.* § 9412(b) (establishing 12-percent excise tax on consumer fireworks).

132. *Id.* § 9404 (establishing use restrictions on consumer fireworks).

133. *Id.* § 9414 (establishing penalties for the use of consumer fireworks).

2. *Consumer Fireworks: The Good Stuff*

In general, Consumer Fireworks are ground-based and aerial devices purchasable by ordinary users; bottle rockets, firecrackers, Roman candles, and smaller aerial shells, for instance, fall within the Consumer Fireworks category.¹³⁴

The 2017 Revised Fireworks Act's definition for Consumer Fireworks references federal government and industry standards.¹³⁵ A Consumer Firework is:

[a]ny combustible or explosive composition . . . which is intended to produce visible or audible effects by combustion, is suitable for use by the public, complies with the construction, performance, composition and labeling requirements promulgated by the Consumer Products Safety Commission . . . or any successor regulation and complies with the provisions for "consumer fireworks" as defined in APA 87-1 or any successor standard, the sale, possession and use of which shall be permitted throughout this Commonwealth.¹³⁶

This approach to defining Consumer Fireworks, which reflects the Act's permissive structure, is almost as broad in what it allows consumers to purchase and use as the 1939 Fireworks Act was in what it prohibited.¹³⁷

There is no permit system for Consumer Fireworks; if one is at least 18 years old and otherwise complies with a short list of use restrictions, then one may purchase, possess, and use Consumer Fireworks.¹³⁸ These restrictions include: (1) obtaining permission from the owner of property where the user will launch Consumer Fireworks; (2) not using fireworks within vehicles or buildings; (3) not directing fireworks toward vehicles, buildings, or people; (4) not using fireworks while under the influence of intoxicants; and (5) not using fireworks within 150 feet of an occupied structure.¹³⁹ These use restrictions are reasonable, common-sense, and hardly burdensome to consumers.

134. See APA STANDARD 87-1 § 3.1.

135. 72 P.S. § 9401(1) (LEXIS through 2018 Reg. Sess. Acts 1–41, 43–68, 70–76) (defining "Consumer Fireworks").

136. *Id.*

137. Compare *id.* § 9401, with Act of May 15, 1939, No. 65, 1939 Pa. Laws 134, 135 (1939).

138. See 72 P.S. § 9404(a) ("A person who is at least 18 years of age and meets the requirements of this article may purchase, possess and use consumer fireworks.").

139. *Id.*

The 2017 Revised Fireworks Act provides a clear penalty for the misuse of Consumer Fireworks: misuse is a summary offense punishable by a fine of up to \$100.¹⁴⁰ The Act also provides a penalty for selling Consumer Fireworks illegally, which is a second-degree misdemeanor.¹⁴¹ The summary fine for misuse suggests that the drafters of the 2017 Revised Fireworks Act recognized that, while worth discouraging, the peccadillos of ordinary fireworks users are insufficient grounds for more serious penalties.

The provisions allowing the use of Consumer Fireworks are the most significant changes from the old law ushered in by the new. The 2017 Revised Fireworks Act facilitates celebration by permitting the use of Consumer Fireworks under certain conditions.¹⁴² Further, the Act promotes safety through its regulations with respect to age, sales, and use.

3. *Display Fireworks: For Permit Holders Only*

Display Fireworks are much larger devices used by professional pyrotechnicians.¹⁴³ The 2017 Revised Fireworks Act provides a definition of the large fireworks typically used by professional pyrotechnicians.¹⁴⁴ This Act's definition, which relies on relative size and explosive content, draws a somewhat indistinct line between display and Consumer Fireworks. Salutes, which are fireworks designed specifically to produce a loud report, are Display Fireworks if they contain over 130 milligrams of explosive material.¹⁴⁵ Aerial shells containing "more than 60 grams of pyrotechnic compositions" are always Display Fireworks.¹⁴⁶ Additionally, the Act treats "other display pieces" that exceed the amount of explosive materials of Consumer Fireworks as Display Fireworks.¹⁴⁷ Though the Act does not purport to offer an exhaustive list of Display Fireworks, APA standards provide additional clarification about specific items.¹⁴⁸

The 2017 Revised Fireworks Act preserves the 1939 Fireworks Act's reliance on permits to regulate fireworks displays and grants

140. *Id.* § 9414.

141. *Id.*

142. *Id.* § 9404 (allowing the use of Consumer Fireworks under certain conditions).

143. *See* APA STANDARD 87-1 § 3.

144. *See* 72 P.S. § 9401. Display fireworks are "[l]arge fireworks to be used solely by professional pyrotechnicians and designed primarily to produce visible or audible effects by combustion, deflagration or detonation." *Id.*

145. *Id.*

146. *Id.*

147. *Id.*

148. *See* APA STANDARD 87-1 § 4.

the power to issue display permits to “municipalities,” a term which includes a city, borough, incorporated town, or township.¹⁴⁹ A permit seeker must be at least 21 years old and must post a bond of at least \$50,000 against possible injury to people and property resulting from the display.¹⁵⁰ The new minimum bond requirement is a 100-fold increase¹⁵¹ from the previous minimum, reflecting not only the past 80 years of monetary inflation but also an increased emphasis on conducting safe fireworks displays.

The 2017 Revised Fireworks Act states that permission “shall be given” by municipalities to conduct fireworks displays under “reasonable rules and regulations,” vesting local government with some discretion as to when a fireworks display may take place.¹⁵² Otherwise, the Act requires that a “competent operator” handle every display and that a designee of the municipality, such as its fire chief, “properly inspect[]” the display, which must be “of a character and so located” that it is neither hazardous to property nor dangerous to any person.¹⁵³ But a major change in the 2017 Revised Fireworks Act is that these display permits are transferrable;¹⁵⁴ conceivably one pyrotechnician could take on the work of obtaining municipal approval for a display and then, after receiving approval, sell the permit obtained to another pyrotechnician. Transferrable permits are a serious departure from the 1939 Fireworks Act, under which display permits were specifically *not* transferrable.¹⁵⁵

The 2017 Revised Fireworks Act retains a “rain-check” provision for extending a display permit when the planned display does not take place “because of unfavorable weather.”¹⁵⁶ A permittee has 24 hours from the scheduled display to apply to the municipality for an extension.¹⁵⁷ The application must state under oath that the display did not take place and give the reason.¹⁵⁸ If the municipality believes the statement, then the Act provides that it “shall extend” both the provisions of the permit and the application of the

149. Compare 72 P.S. § 9402, with Act of May 15, 1939, No. 65, 1939 Pa. Laws 134, 135 (granting municipalities the power to issue permits for supervised public fireworks displays).

150. See 72 P.S. § 9402.

151. Compare *id.*, with Act of May 15, 1939, No. 65, 1939 Pa. Laws at 135.

152. 72 P.S. § 9406.

153. *Id.*

154. *Id.*

155. Act of May 15, 1939, No. 65, 1939 Pa. Laws at 135 (“No permit granted hereunder shall be transferrable.”).

156. 72 P.S. § 9403(a).

157. *Id.*

158. *Id.* § 9403(b).

posted bond to the requested date, which must be within one week of the originally scheduled date.¹⁵⁹

Aside from display permits, the Act also permits the use of Display Fireworks for agricultural purposes.¹⁶⁰ Further, the law permits the use of blank cartridges, which the Act classifies as Display Fireworks, in conjunction with theater, sports, and military organizations.¹⁶¹ In preserving these areas of use, however, the Act specifies that the fireworks or blank cartridges must be “used as authorized by a permit” for those activities.¹⁶²

The 2017 Revised Fireworks Act provides for agricultural use permits, which a municipality may issue under “reasonable rules and regulations” for the purpose of protecting crops from birds and animals.¹⁶³ Agricultural use permits are valid for one year, and permittees may only possess and use fireworks for the purpose that the permit states.¹⁶⁴ An interesting question of statutory interpretation is whether the 21-year-minimum-age and \$50,000-bond requirements of display permits also apply to these agricultural use permits, because agricultural use permits are first mentioned in conjunction with display permits in the “Permits” subsection of the new law.¹⁶⁵ A conscientious municipality could potentially require such a bond before issuing an agricultural permit because the law says that a municipality “shall require” a bond before issuing a permit.¹⁶⁶ Of course, to require such a payment would be ridiculous when the risk of injury in conjunction with agricultural use is minimal, and the requirement would doubtless be a great burden on the typical seekers of such permits: farmers trying to keep birds and animals from their crops.

Surprisingly, the criminal penalties relating to Display Fireworks under the 2017 Revised Fireworks Act only punish individuals who illegally offer Display Fireworks for sale.¹⁶⁷ Selling Display Fireworks in violation of the law is a third-degree felony.¹⁶⁸ Although the Act purports to restrict when and by whom Display Fireworks may be used, it provides no penalties that directly refer-

159. *Id.* § 9403(c).

160. 72 P.S. § 9405.

161. *Id.* § 9402(a).

162. *Id.*

163. *Id.* § 9405(a).

164. *Id.* § 9405(b), (c).

165. *See id.* § 9402(a)–(c).

166. 72 P.S. § 9402(c).

167. *Id.* § 9414.

168. *Id.*

ence the misuse of Display Fireworks.¹⁶⁹ The sole penalty that could apply when someone misuses Display Fireworks is the Act's forfeiture provision allowing state police to confiscate, at the owner's expense, Display Fireworks that are "offered or exposed for sale, stored or held in violation" of the new law.¹⁷⁰

The 2017 Revised Fireworks Act aims to keep Display Fireworks in the hands of the professional pyrotechnicians who are qualified to use them. The Act promotes celebration by allowing those pyrotechnicians to continue their old tradition of producing memorable displays. The Act also promotes safety by ensuring every display is handled by a "competent operator."¹⁷¹ Though the transferability of display permits is a potential source of abuse, the display fireworks provisions otherwise accomplish both objectives of good fireworks regulation.

4. *Federally Illegal Fireworks*

The final category of fireworks that the 2017 Revised Fireworks Act addresses are fireworks that are illegal under federal law.¹⁷² Pursuant to the Consumer Protection Safety Act¹⁷³ and the Federal Hazardous Substances Act,¹⁷⁴ Congress has given the executive branch the power to regulate the transport of fireworks in interstate commerce.¹⁷⁵ Federal law classifies certain fireworks, such as M-80s, silver salutes, and cherry bombs as "banned hazardous substances"; these fireworks, all of which are essentially large firecrackers, are illegal everywhere in the United States, including Pennsylvania.¹⁷⁶

The 2017 Revised Fireworks Act gives a nod to the umbrella of federal fireworks regulations, providing notice to readers of the Act that other important regulations exist.¹⁷⁷ The complete prohibition

169. *Id.* Other criminal laws, of course, could apply to instances of display fireworks misuse. *See, e.g.*, 18 PA. CONS. STAT. § 2716 (2002) (criminalizing the unlawful manufacture, possession, and use of "weapons of mass destruction," including "explosives").

170. 72 P.S. § 9415.

171. *Id.* § 9406(b).

172. *See id.* § 9414(4) (sellers of federally illegal fireworks commit a felony of the third degree).

173. *See* Consumer Protection Safety Act, 15 U.S.C. §§ 2051–2089 (2018).

174. *See* Federal Hazardous Substances Act, 15 U.S.C. §§ 1261–1278a (2018).

175. *See, e.g.*, Fireworks Devices, 16 C.F.R. §§ 1507.1–1507.12 (2018).

176. *See* Banned Hazardous Substances, 16 C.F.R. § 1500.17(a)(3) (2018).

177. *See* 72 P.S. § 9414(4).

on these devices promotes safety because their explosive content, lack of labeling, and illicit origins greatly endanger consumers.¹⁷⁸

C. *The Social Cost of Fireworks Use*

As history demonstrates, one reason for regulating fireworks is their potential to cause people injury.¹⁷⁹ In the early-20th century, fireworks caused many injuries and deaths, especially among children, which led to their general prohibition in Pennsylvania.¹⁸⁰ But what is the extent of fireworks injuries today? An answer to this question will inform this Comment's suggested changes to the law.

1. *Fireworks Injuries Today*

Recent statistics suggest that the problem of fireworks injuries in the United States has become less severe than it was in the early-20th century. Chiefly, only four deaths resulted from fireworks accidents in 2016.¹⁸¹ Staff of the U.S. Consumer Product Safety Commission ("Commission staff") reported on each of those four deaths, and the narratives that Commission staff developed suggest that each death involved unusual circumstances.¹⁸² Commission staff also reported approximately 11,100 fireworks-related emergency room visits in 2016; of these 11,100 injuries, 7,600 occurred between June 18th and July 18th,¹⁸³ corroborating the common wis-

178. BUREAU OF ALCOHOL, TOBACCO, FIREARMS, AND EXPLOSIVES, FACT SHEET-ILLEGAL EXPLOSIVE DEVICES (2018), <https://bit.ly/2liXOmz> [<https://perma.cc/T6DF-EFQY>].

179. *See supra* Part II.D.

180. *See supra* Part II.D.1.

181. *Compare* YONGLING TU, U.S. CONSUMER PROD. SAFETY COMM'N, 2016 FIREWORKS ANNUAL REPORT: FIREWORKS-RELATED DEATHS AND EMERGENCY DEPARTMENT-TREATED INJURIES DURING 2016, at 9 (2016) [hereinafter 2016 FIREWORKS ANNUAL REPORT], <https://bit.ly/2BH7UrL> [<https://perma.cc/QA6W-DDKX>], with BROCK, *supra* note 22. Commission staff reported a total of 114 fireworks-related deaths for the years 2001 to 2016, an average of 7.1 per year. 2016 FIREWORKS ANNUAL REPORT, *supra*.

182. 2016 FIREWORKS ANNUAL REPORT, *supra* note 181, at 8. One victim, who had a history of constructing homemade fireworks, died when the firework that he was constructing exploded. *Id.* The next victim died when a piece of PVC pipe that he was using to launch "large mortar-type fireworks" exploded. *Id.* The third victim placed a mortar shell into a launch tube upside-down, lit the firework, and set the launch tube on top of his head; the device exploded, killing him. *Id.* The final victim was standing on the roof of his home and fell to his death after launching a firework from a mortar tube that he held in his hand. *Id.* The Commission is careful to note that four deaths should be considered a minimum because the death toll of immediately previous years was higher. *Id.* At any rate, the death toll in recent years pales in comparison to what it was one century ago. *See supra* note 58.

183. 2016 FIREWORKS ANNUAL REPORT, *supra* note 181, at 1.

dom that most use of fireworks happens around Independence Day. Significantly, Commission staff associated sparklers with more injuries than bottle-rockets, but fewer injuries than firecrackers.¹⁸⁴ Children under 15 years old accounted for 31 percent of the estimate for fireworks injuries in 2016.¹⁸⁵ Therefore, the problem of fireworks injury, if still quite serious, is at the very least *predictable*—with most emergency room visits clustered around early July.

2. *Current 12-Percent Excise Tax and Subsidy*

The 2017 Revised Fireworks Act includes a tax¹⁸⁶ that applies specifically to sales of Consumer Fireworks as well as a subsidy scheme¹⁸⁷ that allocates a portion of the tax collected to firefighter and EMS training. The Act's "Consumer Fireworks tax" is a 12-percent excise tax imposed at the time of purchase that applies in addition to existing state and local taxes.¹⁸⁸ The tax provides revenue for the state, some of which goes into the state's General Fund, and some of which applies toward the two subsidies described in the fireworks law.¹⁸⁹

The subsidy of the 2017 Revised Fireworks Act is a limited re-infusion of the Consumer Fireworks Tax revenue into training initiatives for firefighters and emergency medical personnel.¹⁹⁰ The Act provides that one-sixth of the tax collected, to a maximum of \$2 million, will be put toward two programs.¹⁹¹ One-quarter of that amount (a maximum of \$500,000) will go toward "the Online Training Educator and Training Reimbursement Account for the purposes of developing, delivering and sustaining training programs for volunteer firefighters,"¹⁹² and the State Fire Commissioner has discretion how to spend the money.¹⁹³ The other three-quarters of that amount (a maximum of \$1.5 million) will go to the Emergency Medical Services Grant Program.¹⁹⁴ The subsidy scheme also im-

184. *Id.* at 3. Sparklers were associated with 900 ER visits in 2016. *Id.* Bottle rockets were associated with 400 ER visits in 2016. *Id.* Firecrackers were associated with 1,300 ER visits in 2016. *Id.* at 2.

185. *Id.*

186. 72 P.S. § 9412 (LEXIS through 2018 Reg. Sess. Acts 1–41, 43–68, 70–76).

187. *Id.* § 9413.

188. *Id.* § 9412. For examples of how the Consumer Fireworks Tax interacts with other state and local taxes, see PA. DEP'T OF REVENUE, CONSUMER FIREWORKS TAX Q&A FACT SHEET (2017), <https://bit.ly/2OpABxe> [<https://perma.cc/R2CW-XK8R>].

189. *See* 72 P.S. § 9413(a).

190. *Id.*

191. *Id.*

192. *Id.* § 9413(a)(2).

193. *Id.* § 9413(a).

194. *Id.*

plies that if fireworks tax revenue exceeds \$12 million in a given year, then each additional dollar will go directly into the state's General Fund.¹⁹⁵

3. *The Pigouvian Approach to Reducing Fireworks Injuries*

The state legislature could change the 2017 Revised Fireworks Act so that its tax and subsidy would directly confront the social cost of Consumer Fireworks use in Pennsylvania. Accordingly, the legislature should modify the law to include a Pigouvian tax.¹⁹⁶ In its simplest stated form, “[a] Pigouvian tax is a tax equal to the harm that [a] firm imposes on third parties.”¹⁹⁷ The harms resulting from the use of Consumer Fireworks represent what economists term a “negative externality.”¹⁹⁸ Fireworks vendors impose a negative externality on Pennsylvania's citizens by selling Consumer Fireworks, each of which has the potential to cause injury, and some of which *do* cause injury.¹⁹⁹

An advantage of a Pigouvian tax on fireworks is that it would raise revenue *only* to the extent that the revenue thwarts the negative externality of fireworks injuries.²⁰⁰ Thus, if the current tax rate of 12 percent should provide the state with more revenue than thwarting fireworks injuries requires, then the state legislature could adjust the rate downward to the benefit of vendors and consumers, who would pay less tax; but if the tax rate should not pro-

195. 72 P.S. § 9413. Section 9413(a) provides that “[o]ne-sixth of the tax collected under this article in a fiscal year, not to exceed \$2,000,000, shall be transferred annually.” *Id.* Thus, because \$2 million is one-sixth of \$12 million, any receipts beyond \$12 million will not result in additional funding for the subsidy. These receipts beyond \$12 million instead pass into the state's “General Fund.” *Id.* § 9412(a).

196. Jonathan S. Masur & Eric A. Posner, *Toward a Pigouvian State*, 164 U. PA. L. REV. 93, 94–95 (2015) (arguing that Pigouvian taxes are an effective, though underused, means of addressing negative externalities in business contexts such as financial services and the environment). Masur and Posner state that most economists believe Pigouvian taxes are “the optimal form of regulation of firms that produce negative externalities.” *Id.* at 94.

197. *Id.* at 95. Pigouvian taxes are named after the English economist Arthur Pigou. *Id.* at 94–95.

198. *Id.* at 100. A negative externality is both “a common type of market failure” and “a cost imposed on third parties by the activity of an individual or firm.” *Id.*

199. *See supra* Part III.C.1.

200. Masur & Posner, *supra* note 196, at 104. A Pigouvian tax must only raise revenue to the extent it deters the cost of the socially undesirable outcome. *Id.* But if the tax goes too far, then it has more in common with a “sin tax” on consumers and leads to sub-optimal outcomes. *See* Franklin Liu, Note, *Sin Taxes: Have Governments Gone Too Far in Their Efforts to Monetize Morality?*, 59 B.C. L. REV. 763, 778–81 (2018) (arguing sin taxes lead to misappropriation of tax revenue, black markets, and disproportionate effects on poor consumers).

vide enough revenue, then the legislature would have to increase the rate.²⁰¹ Although a weakness of Pigouvian taxes is that one must place a monetary value on abstract negative externalities, a task historically difficult for policymakers,²⁰² the availability of data regarding fireworks injuries provides a useful starting point.²⁰³ Finally, because the legislature has already imposed an excise tax on fireworks, the political wrangling that typically attends the imposition of a new tax would be unlikely to hinder comparably minor adjustments in the rate over time.²⁰⁴ In short, to make the fireworks tax “Pigouvian,” all the state government must do is use the revenue from the Consumer Fireworks Tax to target the negative externalities of fireworks, and adjust the rate of taxation downward when the externalities disappear.

In the context of fireworks regulation, a corresponding subsidy is necessary to give full effect to a Pigouvian tax targeting the externality of fireworks injuries. The 2017 Revised Fireworks Act currently subsidizes training for firefighters and EMS personnel.²⁰⁵ While firefighter and EMS training rationally relate to fireworks safety, the principal focus of such first responders is remedial action after an injury has already occurred.²⁰⁶ But the legislature, consistent with fundamental injury prevention principles,²⁰⁷ should also

201. See Masur & Posner, *supra* note 196, at 100–01.

202. *Id.* at 98. “Pigouvian taxes do not solve a significant information problem, which is how the regulator values the harm caused by economic activity.” *Id.*

203. *Supra* Part III.C.1.

204. See Masur & Posner, *supra* note 196, at 98.

205. See *supra* Part III.C.2.

206. See *What Is EMS?*, EMS.GOV (2018), <https://bit.ly/2BObr83> [<https://perma.cc/HHR4-G7Y9>] (discussing the nature of Emergency Medical Services, or “EMS,” in relation to health care, public health, and public safety). Ems.gov explains that “[o]nce [EMS] is activated by an incident that causes serious illness or injury, the focus of EMS is emergency medical care of the patient(s).” *Id.* Beyond this responsive medical care, however, EMS “is integrated with other services and systems intended to maintain and enhance the community’s health and safety.” *Id.* Thus, effective EMS is unquestionably an important component of a fireworks regulation framework that promotes safe celebration.

207. See, e.g., WORLD HEALTH ORG., BURN PREVENTION: SUCCESS STORIES, LESSONS LEARNED 3–8 (2011), <https://bit.ly/2DPNXz5> [<https://perma.cc/W6U4-YMRM>] (discussing fundamentals of burn prevention policy). Per the WHO, “injuries in general, and burns in particular, can be most effectively addressed when approached . . . using the scientific method.” *Id.* at 3. The scientific approach to the prevention of burn injuries includes the application of the “Haddon Matrix,” a conceptual framework that analyzes burn injury events with reference to temporal “phase” (pre-event, event, and post-event) and contributory “factors” (host, agent, physical environment, and socioeconomic environment). *Id.* at 4. Thus, typical EMS response would be classified by the Haddon Matrix as a post-event phase, physical environment factor in burn prevention. See *id.* at 4, 6.

subsidize approaches to fireworks injury prevention that target the time before a fireworks injury takes place.²⁰⁸

Specifically, the law should implement a public information campaign²⁰⁹ to educate the public about safe fireworks use at strategic times when the risk of injury is greatest, allowing users to avoid the mistakes that lead to injury. The time to provide fireworks users with this information is slightly before fireworks use and emergency room visits begin to increase with the approach of Independence Day.²¹⁰ This campaign could use various mediums: radio, television, and the Internet are all potential avenues for public service announcements that speak to basic fireworks safety.²¹¹ Print sources of information—such as ads in local newspapers, brochures that all fireworks vendors must distribute at the time of sale, or warning decals affixed to fireworks packaging which graphically depict the danger of injury—would also reach many people.²¹² Considering the projected yearly revenue of the Consumer Fireworks tax, paid distribution of information in a planned campaign

208. See *id.* at 34–46. One pre-event phase strategy that the WHO recommends for the prevention of fireworks injuries is the “outright banning of fireworks.” *Id.* at 34. Yet there are effective approaches short of complete prohibition; for instance, a combination of regulatory legislation, strict enforcement of fireworks laws, and public education in fireworks safety succeeded at reducing fireworks injuries in Denmark between 1992 and 1993. *Id.* at 35.

209. See Janet A. Weiss & Mary Tschirhart, *Public Information Campaigns as Policy Instruments*, 13 J. POL’Y ANALYSIS & MGMT. 82 (1994) (“[P]ublic information campaigns are government-directed and sponsored efforts to communicate to the mass public or a segment of the public in order to achieve a policy result.”). Weiss and Tschirhart argue that the advantages of public information campaigns outweigh the disadvantages. *Id.* at 82. One advantage of public information campaigns is their lower cost relative to other policy instruments. *Id.* at 96.

210. See *supra* Part III.C.1.

211. For examples of successful public service announcement campaigns that effectively reached nationwide audiences and led to measurable changes in public behavior, see *The Classics*, AD COUNCIL (2018), <https://bit.ly/2SFqDyo> [<https://perma.cc/HS46-L7LN>]. Although public service announcements are traditionally broadcast by media outlets free of charge, governments can employ paid advertising in order to reach a wide audience. See John P. Murry et al., *Paid- Versus Donated-Media Strategies for Public Service Announcement Campaigns*, 60 PUB. OP. Q. 5 (1996) (“Public service announcement campaign managers considering the use of paid-media PSA campaigns should evaluate the relative financial costs and benefits that paid schedules might provide.”).

212. See, e.g., *Celebrate Safely*, AM. PYROTECHNICS SAFETY & EDUC. FOUND., <https://bit.ly/2UYWgL> [<https://perma.cc/M3KV-8VEE>]. Infographics can effectively and efficiently convey safety information. Cf. Jennifer J. Otten et al., *Infographics and Public Policy: Using Data Visualization to Convey Complex Information*, 34 HEALTH AFFAIRS 1901, 1902 (2015), <https://bit.ly/2VWS97U> [<https://perma.cc/T2YQ-DWTS>] (discussing benefits of using infographics to convey complex policy information).

in advance of Independence Day would be feasible.²¹³ A successful information campaign would make Pennsylvanians more aware of the dangers associated with fireworks at the time of the year that the risk of fireworks injury is at its height.

D. *Regulating Permanent and Temporary Vendors*

The 2017 Revised Fireworks Act regulates Consumer Fireworks vendors differently depending on whether they operate from a “stand-alone permanent structure”²¹⁴ (a brick-and-mortar store) or “temporary structure[]”²¹⁵ (a fireworks stand). But in *Phantom Fireworks Showrooms, LLC v. Wolf*,²¹⁶ the Commonwealth Court declared unconstitutional provisions of the 2017 Revised Fireworks Act that enabled the sale of consumer fireworks from temporary structures; consequently, the law no longer permits the sale of consumer fireworks from fireworks stands.²¹⁷ The legislature should remedy state-constitutional defects in the 2017 Revised Fireworks Act in order to protect the overall regulatory scheme that it created. Further, the legislature should facilitate fair competition between permanent and temporary fireworks vendors.

1. *The Phantom Fireworks Decision*

In *Phantom Fireworks*, several prominent fireworks vendors who operate brick-and-mortar stores challenged the constitutionality of the 2017 Revised Fireworks Act, alleging that the law forced them “[to] compete for sales with vendors in temporary structures having much lower overhead.”²¹⁸ The plaintiffs alleged that this competitive disadvantage was the result of differences in the regulation of permanent and temporary fireworks vendors.²¹⁹

Permanent and temporary fireworks vendors share some basic facilities requirements. Both permanent structures and temporary structures must be facilities “exclusively dedicated” to the sale of

213. See PA. HOUSE COMM. ON APPROPRIATIONS, FISCAL NOTE TO H.B. 542 (Comm. Print 2017), <https://bit.ly/2GQhiwq> [<https://perma.cc/PG6P-585X>]. The estimated revenue for 2018-2019 is \$9.6 million. *Id.* at 5–6.

214. See 72 P.S. § 9407(2) (LEXIS through 2018 Reg. Sess. Acts 1–41, 43–68, 70–76) (discussing requirements for stand-alone permanent structures).

215. See 72 P.S. § 9409 (discussing requirements for all fireworks facilities); *id.* § 9410 (discussing requirements for temporary structures).

216. *Phantom Fireworks Showrooms, LLC v. Wolf*, 198 A.3d 1205 (Pa. Commw. Ct. 2018) (invalidating provisions of the 2017 Revised Fireworks Act related to the sale of fireworks by temporary fireworks vendors).

217. *Id.* at 1230.

218. *Id.* at 1215.

219. *Id.*

fireworks.²²⁰ In view of increased sales at certain times of the year, both must have security personnel on the premises during the week before July 4th and three days before January 2nd.²²¹ The law prohibits smoking, matches, lighters, unaccompanied minors, and Display Fireworks on premises.²²² The new law requires both types of vendors to carry \$2 million of insurance,²²³ to provide employees with operational safety training,²²⁴ and to post emergency evacuation plans “conspicuously.”²²⁵ The last shared provision is that no intoxicants or people who appear to be intoxicated are permitted to enter the premises.²²⁶

In some respects, however, the 2017 Amended Fireworks Act indeed favors temporary vendors. Permanent fireworks vendors, for instance, must comply with stringent construction regulations.²²⁷ A brick-and-mortar store cannot connect to another building, but must be a “stand-alone permanent structure.”²²⁸ For safety purposes, a fire separation must separate areas where a permanent vendor sells fireworks from areas where the vendor stores fireworks.²²⁹ Permanent vendors must also install burglar alarms and fire alarms²³⁰ and host quarterly fire drills.²³¹

Temporary structures, by contrast, save considerably compared to permanent structures in their application and license fees. A temporary structure must pay a \$1,500 application fee and a \$3,000 license fee to operate for its first year, whereas a permanent structure will pay an application fee of \$2,500 and anywhere from an additional \$7,500 to \$20,000 for a license depending on the footprint of the store.²³² Temporary structures have their own facilities requirements, which include fire separations and insurance coverage.²³³ Other facilities requirements ostensibly derive from safety standards of the National Fire Protection Association (NFPA).²³⁴

220. See 72 P.S. § 9409.

221. *Id.* § 9409(1).

222. *Id.* § 9409(2)–(4), (7).

223. *Id.* § 9409(5).

224. *Id.* § 9409(6).

225. See *id.* § 9409(9).

226. *Id.* § 9409(8).

227. *Id.* § 9407(1).

228. *Id.* § 9407(2).

229. *Id.* § 9407(3).

230. See 72 P.S. § 9407(6).

231. *Id.* § 9407(7).

232. See *id.* § 9408.

233. See *id.* § 9410.

234. See *id.* § 9410(a)(4) (“The temporary structure complies with NFPA 1124 as it relates to retail sales of consumer fireworks in temporary structures.”); see also NAT’L FIRE PROT. ASS’N, NFPA 1124: CODE FOR THE MANUFACTURE,

The court observed, however, that the most recent NFPA standards do not contain any safety standards for temporary structures.²³⁵ Thus, as the court emphasized in its analysis of whether the plaintiffs had standing to sue, temporary structures generally “benefit from the expansion of legally permissible product lines, without the concomitant expense of safety features.”²³⁶

The *Phantom Fireworks* plaintiffs challenged the constitutionality of the 2017 Revised Fireworks Act on numerous grounds,²³⁷ but ultimately prevailed on the rationale that the Act impermissibly delegated the General Assembly’s legislative authority.²³⁸ Specifically, the plaintiffs argued that the General Assembly could not delegate the task of establishing safety standards for temporary structures to the NFPA.²³⁹ The Commonwealth Court agreed, reasoning that the General Assembly failed to “provid[e] any of the safeguards required to conform that delegation of authority to constitutional strictures.”²⁴⁰ The 2017 Revised Fireworks Act did not contain a policy statement of the General Assembly, nor any limitations to the NFPA’s discretion in determining standards for temporary structures, nor any requirement that the NFPA hold hearings or accept public comments, nor any means of supervising the NFPA’s standard-drafting process.²⁴¹

In view of these serious deficiencies, the Commonwealth Court held that the 2017 Revised Fireworks Act violated Section 1 of Article II of the Pennsylvania Constitution by impermissibly delegating the legislative authority of the General Assembly.²⁴² The Court decided to sever the offending provisions governing temporary structures rather than invalidate the entire Act, reasoning that “the

TRANSPORTATION, AND STORAGE OF FIREWORKS AND PYROTECHNIC ARTICLES (2006 ed.) (discussing facility requirements of temporary structures).

235. *Phantom Fireworks Showrooms, LLC v. Wolf*, 198 A.3d 1205, 1213 (Pa. Commw. Ct. 2018) (“The current edition of the NFPA Code, published in 2017, contains no safety standards for retail sales of consumer fireworks.”).

236. *Id.* at 1216 (finding that the plaintiffs had established taxpayer standing to challenge the 2017 Revised Fireworks Act).

237. *Id.* at 1213. The plaintiffs unsuccessfully argued that the Act violated the “original purpose” rule of Section 1 of Article III of the Pennsylvania Constitution; the “single subject requirement” and “clear expression of subject matter” rules of Section 3 of Article III; and the “repealed text publication requirement” of Section 6 of Article III.

238. *See Phantom Fireworks*, 198 A.3d at 1226–28, 1230.

239. *Id.* at 1227.

240. *Id.* at 1228.

241. *Id.* The Court also observed that “NFPA drafters may be open to influence by trade groups or individuals whose interests may or may not match those of the electors.” *Id.*

242. *Id.*

General Assembly intended and would prefer to retain as much of [the 2017 Revised Fireworks Act] as possible in order to minimize the effect of the unconstitutional language on the Commonwealth's revenues."²⁴³ Consequently the *Phantom Fireworks* holding, which had the effect of surgically excising the provisions governing temporary structures from the 2017 Revised Fireworks Act, effectively prohibits sales from fireworks stands.

2. *Remedy Constitutional Defects*

Although the effect of the Commonwealth Court's decision in *Phantom Fireworks* was to prohibit sales from fireworks stands, which compete against brick-and-mortar fireworks stores, the court's decision exposes another constitutional defect in the 2017 Revised Fireworks Act. The Act's definition of "consumer fireworks," like its now-invalidated definition of "temporary structures," depends on the improper delegation of legislative authority to a private organization.²⁴⁴ Thus, in undermining the General Assembly's delegation of legislative authority to the NFPA regarding the safety standards for temporary structures, the *Phantom Fireworks* plaintiffs may have endangered the entire 2017 Revised Fireworks Act.²⁴⁵

A close examination of the definition of "consumer fireworks" confirms that it depends on the delegation of legislative authority.²⁴⁶ The definition of "consumer fireworks" is both lengthy and conjunctive; it requires, among other things, that a consumer firework "compl[y] with the provisions for 'consumer fireworks' as defined in APA 87-1."²⁴⁷ APA 87-1, like NFPA 1124, is a standard

243. *Id.* at 1229. The invalidated provisions include: the definitions of "NFPA 1124" and "Temporary Structure" in 72 P.S. § 9401; the first clause of 72 P.S. § 9407, which references temporary structures; 72 P.S. § 9408(a)(1)(ii), which establishes application fees for temporary structures; 72 P.S. § 9408(b)(4), which establishes license fees for temporary structures; 72 P.S. § 9408(c)(2), which establishes procedures for licensure and inspections of temporary structures; and 72 P.S. § 9410, the main section regulating the sale of fireworks from temporary structures. *Id.* at 1230.

244. Compare 72 P.S. § 9401 (LEXIS through 2018 Reg. Sess. Acts 1–41, 43–68, 70–76) (defining "temporary structures" with reference to Standard 1124 of the National Fire Protection Association), with 72 P.S. § 9401 (defining "consumer fireworks" with reference to Standard 87-1 of the American Pyrotechnics Association).

245. Stated more topically, they may be "hoist with [their] own petard." WILIAM SHAKESPEARE, *HAMLET*, act 3, sc. 4.

246. See 72 P.S. § 9401 (defining "consumer fireworks").

247. *Id.*

promulgated by a private organization.²⁴⁸ Further, the 2017 Revised Fireworks Act does not rely on a particular edition of APA 87-1, and in fact requires compliance with “any subsequent edition” of APA 87-1.²⁴⁹

As in *Phantom Fireworks*, the General Assembly has not limited its delegation of authority to the APA by means of constitutional safeguards.²⁵⁰ There is no policy statement for the APA to follow and no limitation to the APA’s discretion in deciding what constitutes a consumer firework.²⁵¹ No provision of the Act constrains the APA’s discretion in deciding what constitutes a consumer firework.²⁵² The Act does not require the APA to hold hearings on its standards for consumer fireworks or to accept comments from the public.²⁵³ Finally, the Act provides no means by which the General Assembly may supervise the APA’s drafting process.²⁵⁴ Overall, the lack of constitutional safeguards for the definition of “consumer fireworks” seems exactly to mirror the fatal flaws of the definition for “temporary structure.”

The 2017 Revised Fireworks Act may continue to function in the absence of sales from temporary structures, but it cannot function without a constitutionally sound definition of fireworks. Rather, a successful challenge to the definition of “consumer fireworks” would likely dismantle Pennsylvania’s new regulatory scheme for fireworks, as numerous sections of the 2017 Revised Fireworks Act necessarily depend on this definition.²⁵⁵ The General Assembly, therefore, should amend the Act to remove instances of impermissible delegation to private organizations like the APA and the NFPA. But if the General Assembly desires to retain

248. Compare 72 P.S. § 9401 (defining “APA 87-1”), with 72 P.S. § 9401 (defining “NFPA 1123”).

249. *Id.* In *Phantom Fireworks*, significantly, the Commonwealth Court declined to construe the words “or any subsequent edition” to mean the 2006 edition of NFPA 1124. See *Phantom Fireworks Showrooms, LLC v. Wolf*, 198 A.3d 1205, 1228 (Pa. Commw. Ct. 2018) (“We cannot ignore the clear language of [the 2017 Revised Fireworks Act] as drafted.”).

250. See *id.* (“The General Assembly delegated authority to the NFPA without providing any of the safeguards required to conform that delegation of authority to constitutional strictures.”).

251. See 72 P.S. § 9401.

252. See *id.* §§ 9401–9416.

253. *Id.*

254. *Id.*

255. See, e.g., *id.* § 9404 (permissible use of consumer fireworks depends on definition of consumer fireworks); *id.* § 9412 (proper collection of the consumer fireworks tax necessarily depends on the definition of consumer fireworks); *id.* § 9414 (penalties for the improper use of consumer fireworks necessarily depends on the definition of consumer fireworks).

these private standards in some form, then it should implement the constitutional safeguards that the Commonwealth Court has emphasized in the *Phantom Fireworks* decision.²⁵⁶

3. *Promote Fair Competition*

The *Phantom Fireworks* decision also illustrates the competitive tension between brick-and-mortar stores and temporary stands that sell fireworks; even well-established vendors desire a level playing field as they compete in this seasonal and difficult market. Yet while the plaintiffs in *Phantom Fireworks* successfully argued for standing to sue based on the business losses that they would face competing with fireworks stands,²⁵⁷ the 2017 Revised Fireworks Act appears to discourage fair competition in a manner that benefits permanent vendors.

A permanent fireworks vendor, for instance, quite reasonably must operate at least 250 feet from a gas station or propane facility because of the risk of fire.²⁵⁸ But if 250 feet gave the drafters of the Act adequate peace of mind when contemplating a petroleum-induced firestorm, then the required distance between different permanent fireworks vendors, 1,500 feet, is perplexing; it is a *six-fold* increase in distance over a similar requirement in the 1939 Fireworks Act.²⁵⁹ The distance requirements for temporary fireworks vendors is similarly odd; like permanent vendors, a temporary vendor must keep 250 feet from any gas station.²⁶⁰ But, in addition, a temporary vendor must keep *five miles* from a permanent vendor.²⁶¹ Stated differently, the distance that the Act requires a temporary vendor to keep from a permanent vendor is a shocking *17.6 times* the distance that a permanent vendor must keep from another permanent vendor.²⁶² Such a requirement is impossible to justify because of safety and appears to be a measure designed to keep fireworks stands widely spaced from brick-and-mortar stores.

256. See *Phantom Fireworks Showrooms, LLC v. Wolf*, 198 A.3d 1205, 1227–28 (Pa. Commw. Ct. 2018) (discussing *Protz v. Workers' Comp. Appeal Bd.*, 161 A.3d 827 (Pa. 2017)).

257. *Id.* at 1215.

258. 72 P.S. § 9407(4).

259. Compare *id.* § 9407(5), with Act of Nov. 30, 2004, No. 204, 2004 Pa. Laws 1598, 1600.

260. 72 P.S. § 9410(a)(1).

261. *Id.* § 9410(a)(5). This distance shrinks to two miles in 2023. *Id.*

262. If one mile is 5,280 feet, then five miles is 26,400 feet. Twenty-six thousand four hundred feet (the distance requirement between a temporary vendor and a permanent vendor) divided by 1,500 feet (the distance requirement between permanent vendors) equals a multiple of 17.6.

If the legislature acts to re-introduce the sale of fireworks from temporary vendors in the wake of *Phantom Fireworks*, then the legislature should repeal the anti-competitive distance requirements which serve primarily to advance the business interests of certain vendors. Safety concerns would probably justify a complete ban on the sale of fireworks from temporary stands under the Commonwealth's police power,²⁶³ and the legislature is free to implement such a ban. But the legislature should not enact restrictions that nakedly punish temporary vendors because they manage successfully to compete with permanent vendors in the highly seasonal market for fireworks. All else being equal, success in the marketplace relative to a competitor is not a legitimate justification for the regulation of private business; the conceit that it is just smacks of cronyism.

IV. CONCLUSION

This Comment has examined a recent example of fireworks legislation that Pennsylvania enacted in late October 2017.²⁶⁴ By tracing the history of Consumer Fireworks and fireworks regulation from Europe to America, several themes have emerged. First, fireworks are inseparable from their martial origins in that every lit fuse and resulting report has the potential to harm people or property, just like the cannons of old.²⁶⁵ Second, ordinary people have long enjoyed fireworks not just through the observation of professional shows, but also through amateur exhibitions in which ordinary people strike the matches.²⁶⁶ Third, amateur users of

263. See, e.g., *Gambone v. Commonwealth*, 375 Pa. 547, 551 (1954) (discussing the nature and extent of the Commonwealth's police power in relation to social and economic welfare legislation). In *Gambone*, the Pennsylvania Supreme Court explained:

[A] law which purports to be an exercise of the police power must not be unreasonable, unduly oppressive or patently beyond the necessities of the case, and the means which it employs must have a real and substantial relation to the objects sought to be attained. Under the guise of protecting the public interests the legislature may not arbitrarily interfere with private business or impose unusual and unnecessary restrictions upon lawful occupations.

Id. Thus, the legislature could rationally conclude that fireworks sales from temporary vendors pose a threat to public health and safety because of concerns that fireworks stands are less secure and pose a greater fire hazard than brick-and-mortar stores. But if the legislature permits sales from both, then an extreme distance requirement between the two arguably bears no rational relation to a legitimate state objective.

264. Act of October 30, 2017, No. 43, 2017 Pa. Laws 672 (2017) (codified at 72 P.S. §§ 9401–9416).

265. See *supra* Part II.

266. See *supra* Part II.A.

fireworks range in character from the demure to the rowdy and from the law-abiding to the outright reckless.²⁶⁷ Fourth, although governments have tried often to snuff out amateur fireworks displays through outright prohibition, early laws failed to accomplish their objectives—either in Merry England or in early America.²⁶⁸ Fifth, prohibitions notwithstanding, the period of relatively unrestricted access to large fireworks led to accordingly large fireworks accidents among commercial producers and amateur consumers in the late-19th and early-20th centuries.²⁶⁹ Sixth and last, it was a reaction to the serious harms and accidents of these unrestricted fireworks that led to spirited and thoughtful debate among Pennsylvania legislators concerning the propriety of regulating fireworks.²⁷⁰

Pennsylvania, this Comment has suggested, first attempted an outright prohibition on most fireworks sales using the Law of 1939.²⁷¹ While the law may have been effective at checking the worst of amateur fireworks injuries, it failed to eliminate them due to a loophole that permitted fireworks manufacturers to sell their wares to purported “out-of-state” customers.²⁷² Despite a court case that ended those straw purchases, the General Assembly first relaxed the prohibition on sales of Consumer Fireworks by explicitly permitting them for true out-of-state customers and then relaxed the Law of 1939 before repealing it entirely.²⁷³

This Comment has examined the 2017 Revised Fireworks Act and has offered suggested improvements.²⁷⁴ First, this Comment described the passage of the Act.²⁷⁵ Second, this Comment examined the four categories of fireworks that the Act establishes.²⁷⁶ Third, this Comment explored the social cost of fireworks use in the present day, establishing that most fireworks injuries occur at a predictable time of the year close to Independence Day.²⁷⁷ Fourth, this Comment described the 12-percent sales tax on fireworks and its accompanying subsidy program toward training programs for firefighters and EMS personnel.²⁷⁸ This Comment argued, how-

267. *See supra* Part II.A.

268. *See supra* Part II.B–C.

269. *See supra* Part II.D.

270. *See supra* Part II.D.1.

271. *See supra* Part II.D.2.

272. *See supra* Part II.D.3.

273. *See supra* Part II.D.4.

274. *See supra* Part III.

275. *See supra* Part III.A.

276. *See supra* Part III.B.

277. *See supra* Part III.C.1.

278. *See supra* Part III.C.2.

ever, that a Pigouvian tax and subsidy targeting the negative externalities of fireworks use through a public information campaign would complement the current scheme, which aims at remedying serious injuries after they have already occurred.²⁷⁹

Finally, this Comment explained the implications of a recent constitutional challenge to the 2017 Revised Fireworks Act.²⁸⁰ As a result of *Phantom Fireworks*, in which the Commonwealth Court concluded that the Act's definition of "temporary structures" impermissibly delegated legislative authority to a private organization without adequate safeguards, the Court selectively overturned provisions of the Act permitting the sale of fireworks from temporary vendors.²⁸¹ That decision, however, implies a constitutional defect in the Act's very definition of "consumer fireworks," which contains an almost identical delegation of legislative authority, and the legislature ought to remedy both defects.²⁸² The *Phantom Fireworks* decision also serves to highlight the anti-competitive view that the Act takes with respect to temporary vendors, and therefore the legislature should amend the Act to promote fair competition between permanent and temporary vendors.²⁸³

In conclusion, with the end of the fireworks prohibition in Pennsylvania, the new law must both address the celebratory habits of fireworks users and keep those same users safe. Even unaltered, it achieves these aims somewhat in its current form. But it can do more. Considering the vast improvements in fireworks safety since the early-20th century, Pennsylvania is closer to alleviating the social cost of fireworks than ever before. May the legislature continue to refine the fireworks law so that fewer people get burned.

279. See *supra* Part III.C.3.

280. See *supra* Part III.D.

281. See *supra* Part III.D.1.

282. See *supra* Part III.D.2.

283. See *supra* Part III.D.3.