

The Carbon Footprint of the Whiskey Industry: is Federal Preemption at Odds with Environmental Health?

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INTRODUCTION

In Mulberry, a small town in Lincoln County, Tennessee, residents have begun noticing the growth of a suspicious black fungus. The most likely culprit? Whiskey. Several Jack Daniels warehouses near the town are home to countless barrels of whiskey. During the distillation process, ethanol is released into the surrounding air, and this evaporated ethanol can feed the growth of certain fungi. The fungus in question has been creating a thick residue on the side of homes,

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cars, street signs, and even trees.¹ Residents are struggling to control its growth, needing to power wash their homes several times a year.² Given the species of fungus, researchers don't think it is directly harmful to humans, however, they can't say for certain until it's been researched further.³ In fact, there is still the possibility that the evaporated ethanol is converted into ethanal (also known as acetaldehyde), recognized as a carcinogen by the International Agency for Research on Cancer.⁴ Furthermore, after researching the health effects, the Indiana State Department of Health recommends that homeowners use PPE when dealing with or removing the fungus—a concerning conclusion.⁵ A mysterious fungus cropping up is disconcerting on its own, but Mulberry is an inhabited town, meaning a whole community of people may now be vulnerable to the fungus' health risks. In fact, residents have already expressed concerns about the physiological as well as mental health risks resulting from their exposure.⁶ This article explores the various challenges and opportunities associated with the community's use of state law to address the growth of this fungus and find recourse for themselves.

Part I of this paper lays out the process of how the “whiskey fungus” is created. It details the method and science behind whiskey maturation, describes how the growth of the fungus results from the “angel's share,” and explains why Jack Daniel's is directly responsible. Part II provides an overview of the Clean Air Act (CAA), the Environmental Protection Agency's (EPA's) authority and role in regulating it, and ethanol emissions standards. This section also illustrates the legal issues Lincoln County residents are currently facing. Finally, Part III provides an overview of the Supremacy Clause and the preemption doctrine, analyzing the types and factors of express and implied preemption through legislative and legal history. This section also explores the CAA's Savings Clauses to determine whether there is federal preemption by evaluating cases that have turned on the same question. This section is crucial to understanding how the CAA's Savings Clauses can protect citizens from having their state law claims dismissed, directly impacting communities as they navigate environmental issues and propose creative solutions. The final section concludes

1. Michael Levenson, *Whiskey Fungus Fed by Jack Daniel's Encrusts a Tennessee Town*, THE N.Y. TIMES (Mar. 1, 2023), <https://www.nytimes.com/2023/03/01/us/whiskey-fungus-jack-daniels-tennessee.html>.

2. See Haven Orecchio-Egresitz, Michelle Mark, and Morgan McFall-Johnsen, *What is 'whiskey fungus'? Where Baudoinia compniacensis comes from, if it's dangerous, and how to get rid of it*, INSIDER (Mar. 2, 2023, 1:14 PM), <https://www.insider.com/what-is-whiskey-fungus-baudoinia-compniacensis-effects-how-remove-2023-2>.

3. See *id.*; see also Matt Colangelo, *Kentucky's Whiskey Fungus Problem is out of Control*, VICE (Nov. 3, 2014, 11:38 AM), <https://www.vice.com/en/article/78dyqb/kentuckys-whiskey-fungus-problem-is-out-of-control>.

4. See Colangelo, *supra* note 3.

5. See *Baudoinia compniacensis* “Whiskey Fungus,” IND. ST. DEP'T OF HEALTH 1, (Mar. 2019), <https://www.in.gov/health/eph/files/Baudoinia-compniacensis-Fact-Sheet-Final-March-2019.pdf>.

6. Caroline Eggers, *'Whiskey fungus' is Covering this Tennessee Town. Jack Daniel's Ethanol Pollution is to Blame.*, 90.3 WPLN NEWS (Apr. 12, 2023), <https://wpln.org/post/whiskey-fungus-is-covering-this-tennessee-town-jack-daniels-ethanol-pollution-is-to-blame>.

by finding that there is legal precedent against preemption of federal statutes. The CAA's Savings Clauses may be used as a means of preserving state law claims against federal preemption. However, not all circuits have or must follow this determination, potentially leaving many communities around the country vulnerable if they find themselves in similar situations. Because multiple areas of Lincoln County are home to disadvantaged communities,⁷ this fungus poses an additional burden on residents' health and wellbeing. In fact, the issues this article presents would only have a greater impact on environmental justice communities who are often located near factories technically compliant with the CAA regulations and EPA oversight.

I. THE CREATION OF A "WHISKEY FUNGUS"

Baudoinia, a term coined by Dr. James A. Scott, is a "whiskey fungus"⁸ that results in the "development of dark discoloration on outdoor surfaces" that are exposed to "ethyl alcohol (ethanol) vapor."⁹ This occurs during the natural aging process of liquor and has been observed since 1872 when Antonin Baudoin, the fungus' namesake, "noticed the accumulation of a soot-like blackening of walls around distilleries."¹⁰ The alcohol itself is resistant to changes in temperature and is thus able to withstand very high heat, such as the hot summers of Tennessee.¹¹ While it has been observed for centuries, it was Dr. Scott's discoveries and resulting publication that brought attention to the whiskey fungus.¹² Accordingly, residents in Louisville, Kentucky battling the same fungus sued distilleries in the region multiple times in the last decade.¹³ However, these communities did not succeed in their air pollution lawsuits because the distilleries had been complying with CAA standards. Likewise, suing through tort for any adverse health consequences suffered may be equally unsuccessful due to possible federal preemption by the CAA. While this is not a new phenomenon, Lincoln County residents are still struggling to find a remedy. Why is fungal growth akin to something from *Stranger Things* taking over this town?

A. The Whiskey Maturation Process

Six Jack Daniel's Tennessee Whiskey (Jack Daniel's) warehouses are constructed near residential homes in Lincoln County—another six to eight

7. Parts of Lincoln County have been identified as "disadvantaged" under the Health, Climate Change, and Transportation categories. See *Explore The Map*, CLIMATE AND ECON. JUST. SCREENING TOOL, (Nov. 22, 2022), <https://screeningtool.geoplatform.gov/en/#8.87/35.1133/-86.609>.

8. James A. Scott & Richard C. Summerbell, BIOLOGY OF MICROFUNGI 413, 417 (De-Wei Li ed., 2016).

9. *Id.* at 413.

10. *Id.* at 413-414.

11. See Levenson, *supra* note 1.

12. See Colangelo, *supra* note 3.

13. See *Brown-Forman Corp. v. Miller*, 528 S.W.3d 886 (Ky. 2017).

potentially on the way.¹⁴ The barrelhouses, as Jack Daniel's calls them, store thousands of barrels of whiskey—the newest and largest holding up to 67,000.¹⁵ After distillation, the liquor is poured into wooden barrels to undergo a years-long maturation process.¹⁶ Bourbon must mature for a minimum of two years; Scotch for three.¹⁷ During this aging period, temperature and humidity changes cause the barrels' wood to contract and expand, moving the whiskey in and out of the porous wood.¹⁸ This process gives whiskey its recognized color, flavor, and aroma.¹⁹ However, it also causes a fair amount of the liquid to evaporate.²⁰ All barrel-aged liquors have this side effect. However, the evaporation is so notable in the whiskey industry that the phenomenon was named the “angel's share.”²¹ This term describes the evaporated whiskey that disappeared or “floated up to the angels.”

B. *The Angel's Share of Whiskey*

The climate where the barrels are stored, along with the seasonal variation in temperature and humidity, are a crucial factor in determining the volume of the angel's share (the amount of evaporated ethanol).²² The cooler the environment, the slower the liquor will age and evaporate.²³ Likewise, barrels “intermittently or constantly exposed to heat and humidity”—for example, those in an area with high temperatures and large temperature fluctuations—will result in a liquor that matures faster.²⁴ The following graphs compare the average temperatures in Fayetteville, Tennessee, and Moray, Scotland. Fayetteville is the seat of Lincoln County and Moray is used as a comparison because it is home to

14. Chloe Taylor, *Jack Daniel's warehouse project halted after local residents complain of facing a plague of whiskey fungus 'on steroids'*, YAHOO! (Mar. 2, 2023), <https://www.yahoo.com/lifestyle/jack-daniel-warehouse-project-halted-164151526.html> (Jack Daniel's Distillery told Lincoln County officials that with another 14 warehouses, it could generate \$1 million annually for the county through tax revenue).

15. See *Distillery Expansion*, JACK DANIEL'S BOTTLES (n.d.), jackdanielsbottles.com/distillery/expansion/.

16. See Emily Saladino, *What Does 'Angel's Share' Mean in Spirits?*, WINE ENTHUSIAST (Dec. 27, 2022), <https://www.wineenthusiast.com/culture/spirits/angels-share-meaning/>.

17. See *id.*

18. See *id.*

19. See U.S. EPA, OFF. OF AIR QUALITY PLAN. AND STANDARD, EMISSION FACTOR AND INVENTORY GRP., REP. ON EMISSION FACTOR DETERMINATION FOR AP-42 DISTILLED SPIRITS 2-7 (Mar. 1997), <https://www.epa.gov/sites/default/files/2020-10/documents/b9s12-3.pdf> [hereinafter U.S. EPA, OFF. OF AIR QUALITY PLAN. AND STANDARD].

20. See Saladino, *supra* note 16.

21. *Id.*

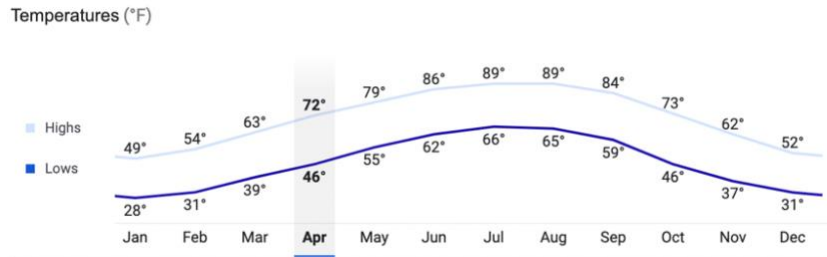
22. See U.S. EPA, OFF. OF AIR QUALITY PLAN. AND STANDARD, *supra* note 19, at 2-8.

23. Saladino, *supra* note 16.

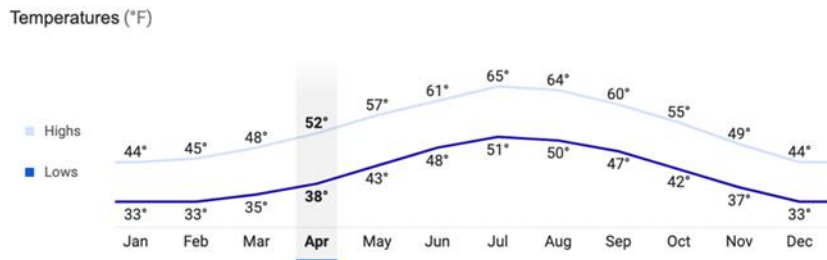
24. *Id.*

more than half of all whisky²⁵ producers in Scotland and has the “highest per capita carbon emissions in Scotland.”²⁶

Graph 1: Fayetteville, Tennessee: Annual Temperature Range (Fahrenheit)



Graph 2: Moray, Scotland: Annual Temperature Range (Fahrenheit)



The highest temperature in Fayetteville is around 89°F, the lowest is 28°F, and the average temperature range is 61 degrees. Conversely, Moray’s highest temperature is only 65°F, and its lowest is around 33°F, giving it an average temperature range of only 32 degrees—half of Fayetteville’s variation. This data, combined with the fact that higher temperatures and greater fluctuations between hot and cold lead to the faster maturation of whiskey, means that Tennessee whiskey ages much quicker than liquor from a moderate climate, such as Scotland’s. Ethanol is the principal emission from whiskey production, primarily occurring during the aging phase.²⁷ Since faster maturation in turn leads to greater levels of evaporation, the accumulation of ethanol in the surrounding air is a bigger problem for Southern U.S. states than for Scotland, the largest whisky producer in the world. In fact, the angel’s share in Scotland might only be 2–3 percent annually while being “upwards of 5 percent . . . in hotter destinations like

25. It is generally spelled “whiskey” – with an *e* – in the U.S. and Ireland and “whisky” – without an *e* – in Scotland and Canada. Because this paper focuses on the U.S. whiskey industry, it will use the spelling “whiskey.” Anytime “whisky” is used, the word will refer to Scotch, *i.e.*, whisky produced and bottled entirely in Scotland.

26. Katharine Swindells, *Whisky’s Carbon Problem: Can it Become Sustainable?*, ELITE TRAVELER (Nov. 1, 2021), <https://elitetraveler.com/finest-dining/wines-and-spirits/whisky-carbon-problem-become-sustainable>.

27. See U.S. EPA, OFF. OF AIR QUALITY PLAN. AND STANDARD, *supra* note 19, at 2-11.

Kentucky.”²⁸ 2 percent roughly equates to around 5 million gallons,²⁹ meaning that up to 12.5 million gallons of whiskey may be lost to evaporation in places like Tennessee and Kentucky. This is crucial to understand because as charming as the phrase “angel’s share” might sound, ethanol—a large component of the lost whiskey—is a harmful chemical to humans when inhaled or absorbed through the skin.³⁰ The lost whiskey is certainly not floating up to the angels but is rather drifting across to nearby towns, condensing upon contact with moisture, and becoming a breeding ground for the fungus.³¹

What is clear so far? There is a potentially dangerous whiskey fungus growing unimpeded all over Lincoln County, and it is likely caused by at least six Jack Daniel’s barrelhouses in the same area. It is known that ethanol evaporates from aging whiskey and can “travel hundreds of yards,”³² a process exacerbated by Lincoln County’s scorching summers, in turn increasing ethanol emission rates.³³ It is no secret that this strange black fungus is evidently caused by evaporating ethanol from whiskey, nor that it is undoubtedly coming from the Jack Daniel’s warehouses. Rather, the concern is how it is impacting vulnerable people around the warehouses who struggle to win a fight against one of the largest spirit and wine corporations in the world.³⁴

II. THE CLEAN AIR ACT AND THE REGULATION OF ETHANOL EMISSIONS

The question now is what recourse the citizens of Lincoln County have. According to the EPA, “Congress designed the Clean Air Act to protect public health and welfare from different types of air pollution caused by a diverse array of pollution sources.”³⁵ So, wasn’t the Clean Air Act (CAA) legislated for the exact reason of protecting communities and the environment from issues such as a growing fungus caused by nearby air polluters?

Congress intended to achieve the CAA’s purpose by charging the EPA with the development and maintenance of national ambient air quality standards (NAAQS).³⁶ To protect public health, NAAQS establish a minimum and uniform standard of air quality that states must enforce by regulating the levels

28. Saladino, *supra* note 16.

29. See Colangelo, *supra* note 3.

30. See *Ethanol (ethyl alcohol)*, AUSTL. GOV’T (June 30, 2022), [https://www.dceew.gov.au/environment/protection/npi/substances/fact-sheets/ethanol-ethyl-alcohol#:~:text=Ethanol%20is%20harmful%20by%20ingestion,tract%20\(nose%20and%20throat\)](https://www.dceew.gov.au/environment/protection/npi/substances/fact-sheets/ethanol-ethyl-alcohol#:~:text=Ethanol%20is%20harmful%20by%20ingestion,tract%20(nose%20and%20throat)).

31. See Colangelo, *supra* note 33.

32. *Jack Daniels Neighbors Balk at Buildup of Whiskey Fungus*, WRAL NEWS (Mar. 12, 2023), <https://www.wral.com/jack-daniels-neighbors-balk-at-buildup-of-whiskey-fungus/20759510/>.

33. See U.S. EPA, OFF. OF AIR QUALITY PLAN. AND STANDARD, *supra* note 19, at 2-11.

34. See Erin Keller, *Whiskey Fungus Infests town – Jack Daniel’s plants targeted in lawsuit*, N.Y. POST (Mar. 6, 2023), <https://nypost.com/2023/03/06/whiskey-fungus-infests-town-jack-daniels-plants-targeted-in-lawsuit/>.

35. *Clean Air Act Requirements and History*, U.S. EPA (Aug. 8, 2023), <https://www.epa.gov/clean-air-act-overview/clean-air-act-requirements-and-history#:~:text=Congress%20designed%20the%20Clean%20Air,diverse%20array%20of%20pollution%20sources>.

36. 42 U.S.C § 7409(b)(1).

of pollutants emitted into the air.³⁷ Since ethanol emissions are considered an air pollutant and hazardous material, they are regulated by the CAA.³⁸

According to an EPA study, the average ethanol emission factor for evaporation losses during the whiskey aging process is 3.1 kg/bbl/yr.³⁹ If, for example, 3.1kg/bbl/yr was the CAA's national standard, then companies that release ethanol during their manufacturing process are legally allowed to emit up to this amount of ethanol *without* violating the CAA. In other words, the CAA must strike a balance between allowing a company to emit what it needs to conduct its business and protecting public health and welfare. Accordingly, the national standards are usually not very stringent because (1) they need to be at a level that allows all states, including ones that heavily rely on manufacturing and distillation industries, to realistically adopt and enforce; and (2) they need to accommodate the various business practices and operations of companies across different industries.

Given that national standards are not overly stringent, the primary issue for Lincoln County residents is that Jack Daniel's *does* comply with the standards promulgated under the CAA. A Brown-Forman spokesperson—Jack Daniel's parent company—stated that “the Jack Daniel's Distillery will continue to comply with regulations and industry standards . . . [for the] barrelhouses in Lincoln County.” However, it is clear from Lincoln County's current state and the grievances of its residents that just because a business complies with federal statutes, does not make their business practices safe nor exempt from causing injury—in this case, harm to property, health, and general welfare. In similar cases involving bourbon (American whiskey) manufacturers in Kentucky, the distilleries complied with the CAA emissions standards despite the same whiskey fungus growth in nearby communities.⁴⁰ In this instance, it was only after a resident successfully sued Jack Daniel's through her local zoning office, arguing on the grounds of improper permitting, that the Lincoln County Court finally issued a work-stop order to halt the construction of six or more proposed warehouses.⁴¹ Residents were not able to halt the construction of the warehouses based on the ethanol emissions, the growth of the fungus on their town and homes, declining property values of hundreds of millions of dollars,⁴² resulting

37. *Id.*

38. Because ethanol is listed on the Substance Registry Services, it is a substance regulated by the EPA. See *Ethanol*, U.S. EPA (Jan. 27, 2023), <https://cdxapps.epa.gov/oms-substance-registry-services/substance-details/3822>.

39. See U.S. EPA, OFF. OF AIR QUALITY PLAN. AND STANDARD, *supra* note 19, at 4-4.

40. See *Merrick v. Diageo Am. Supply, Inc.*, 805 F.3d 685 (6th Cir. 2015); see *Brown-Forman Corp.*, 528 S.W.3d 886.

41. Ed Pilkington, *Jack Daniel's Facility Blocked as Whiskey Vapour Blamed for Spread of Fungus*, THE GUARDIAN (Mar. 2, 2023, 9:39 AM), <https://www.theguardian.com/us-news/2023/mar/02/jack-daniels-whiskey-black-fungus-tennessee>.

42. See Colangelo, *supra* note 3 (multiplying the average reduction in property value by the number of affected homes results in hundreds of millions of dollars. *E.g.*, if a \$200,000 home lost a quarter of its value because of the fungus, then in a class-action suit with 5,000 homes, Jack Daniel's could be liable for around \$250 million in damages).

health issues such as respiratory problems and mental health issues,⁴³ or a diminishing quality of life. However, while residents were not able to use these claims to stop the construction of the warehouses, they could theoretically use state common law as a means of redressing their suffering. For example, if the CAA proves unhelpful in this regard, residents could turn to state law in bringing tort claims for their health issues or private nuisance claims for the interference into the use and enjoyment of their property. In reality, however, it is far more complicated.

III. FEDERAL PREEMPTION OF STATE LAW CLAIMS

A. *The Supremacy Clause and the Preemption Doctrine*

While the Clean Air Act was legislated with the twin goals of promoting and protecting public health and general welfare, it may actually serve as a hinderance for the residents of Lincoln County. While a resident could have a valid tort or property claim, it is unclear whether they will be prevented from bringing that claim due to the doctrine of preemption or whether their state law claims can co-exist with the federal statute. The Preemption Doctrine comes from the Supremacy Clause, which is found under Article VI, Paragraph 2 of the U.S. Constitution. It reads: the “Constitution, and the Laws of the United States . . . shall be the *supreme Law of the Land*; and the Judges in every State shall be *bound* thereby, *any Thing* in the Constitution or Laws of any State *to the Contrary notwithstanding*.”⁴⁴ In simple terms, the U.S. Constitution and other federal laws will supersede any state law, act, or regulation that contradicts or conflicts with them. Federal laws include federal statutes—such as the CAA—administrative regulations, and executive orders.

1. *Express vs. Implied Preemption*

The Supreme Court established the legal hierarchy known as the Preemption Doctrine. There are two types of federal preemption under this doctrine, express and implied preemption. As their names suggest, express preemption is a provision within a federal law or statute that explicitly states that federal law will supersede state law.⁴⁵ Implied preemption, on the other hand, is when federal law supersedes state law without any explicit mention of its ability to do so.⁴⁶

43. See Eggers, *supra* note 6.

44. U.S. Const. art. VI, § 2 (emphasis added).

45. For example, the Airline Deregulation Act passed in 1978 is a law containing express federal preemption over state and local regulations of airline prices, routes, and services. 49 U.S.C. § 41713(b)(1).

46. For example, the Federal Food, Drug, and Cosmetic Act (FDCA), passed in 1938, gives the FDA authority to approve new foods, drugs, and cosmetics, regulate their safety, and create a framework for labeling these products. 21 U.S.C. Ch. 9. In 2001, the Supreme Court held that the FDCA implicitly preempted state law claims that imposed requirements that were different from or added to the federal requirements for medical device labeling. See *Buckman Co. v. Plaintiffs' Legal Comm.*, 531 U.S. 341 (2001).

2. *Types of Implied Preemption: Field, Conflict, Impossibility, and Obstacle Preemption*

Determining whether a law, statute, or regulation has express federal preemption is easy—just look at the text. Deciding whether a statute has implied preemption is much more difficult and something courts have grappled with for years. Over time, courts developed the following tests to help determine when a federal law might contain implied preemption.

The first factor is field preemption. This is the idea that a federal law is so comprehensive that there is no room for further state or local regulation. If Congress occupies all regulation in a given field, then there is an inference that state laws are implicitly preempted.

Rice v. Santa Fe Elevator Corp. is an example of field preemption⁴⁷ Rice, a grain dealer, filed a complaint claiming that the respondents, a warehouse that stored Rice’s grain, charged “unjust, unreasonable, and excessive rates and charges contrary to the Illinois Public Utilities Act” (IPUA).⁴⁸ The Court held that this claim, made under the IPUA, was impliedly preempted by the federal Warehouse Act. Namely, in 1931, Congress amended the Warehouse Act to include the following language: “the power, jurisdiction, and authority conferred upon the Secretary of Agriculture . . . shall be exclusive with respect to all persons securing a license.”⁴⁹ The Supreme Court found that because of this wording, Congress intended to occupy the entire field, stating that “matters regulated by the Federal Act cannot be regulated by the States . . . [and] a federal licensee . . . is subject to regulation by one agency and one agency alone.”⁵⁰

The second factor is conflict preemption, the simple idea that there is a conflict between federal and state law. Under this umbrella term, there are two types of conflict preemption: impossibility and obstacle preemption. *Geier v. Am. Honda Motor Co.* is an example of a case that includes both.⁵¹ In *Geier*, an injured motorist brought a state common law action against an automobile manufacturer for negligently failing to install vehicles with a driver-side airbag, a form of passive safety restraint.⁵² However, the Federal Motor Vehicle Safety Standard (FMVSS) 208 issued by the Department of Transportation (DOT) “required auto manufacturers to equip some but not all of their 1987 vehicles with passive restraints.”⁵³ The Supreme Court held that the state tort claim to equip the petitioner’s vehicle with airbags was preempted by FMVSS 208. While the Court agreed that the more airbags the better, the manufacturer was not liable for failing to specifically install airbags because the standards clearly provided “a range of choices among different passive restraint devices . . . introduced

47. *Rice v. Santa Fe Elevator Corp.*, 331 U.S. 218 (1947).

48. *See id.* at 220-21.

49. 7 U.S.C. § 269 (1994).

50. *Rice*, 331 U.S. at 234.

51. *See Geier v. Am. Honda Motor Co.*, 529 U.S. 861 (2000).

52. *See id.*

53. *Id.*

gradually over time.”⁵⁴ Here, the petitioner’s action depended on manufacturers having a “duty to install an airbag.”⁵⁵ Under impossibility preemption, the emphasis is on *duty*. As such, it becomes impossible to have both the choice (optional) and the duty (required) to implement airbag regulations simultaneously.

Conversely, to understand obstacle preemption, the emphasis on “duty to install an airbag” is now on *airbag*. Imposing the above duty “would have required manufacturers of all similar cars to install airbags rather than other passive restraint systems, such as automatic belts or passive interiors.”⁵⁶ This rule would have created an obstacle to the variety of safety devices that the regulation allowed. This duty would have also been an obstacle to the gradual phase in requirement since the state law would have required all automobiles to be fitted with airbags upon construction, rather than allowing for the adoption of other types of devices later in the manufacturing process.

The conflict’s immediacy is the critical difference between impossibility and obstacle preemption. Impossibility preemption creates an instant and direct conflict between federal and state laws, such as having a choice versus a duty to impose airbags. In obstacle preemption, however, the conflict is whether the state law “stands as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress.”⁵⁷ Thus, while obstacle preemption might make the final goal more difficult to establish or longer to implement, it is not impossible. In *Geier*, there is no direct conflict between the federal and state law (*i.e.*, no impossibility preemption) because airbags still fall within the category of passive restraint devices. However, since the state law would remove choice, impose hurdles, and undermine the regulation’s intent and objectives, the state law causes an implicit preemption conflict.

B. The Role and Impact of Savings Clauses

Due to the different express and implied preemptions, courts use guidelines to determine whether and when a law is preemptive. A significant factor in determining whether there is federal preemption in statutes is to look for a savings clause. A savings clause essentially takes some federal power and gives it to individual states and citizens, *i.e.*, it “saves” some authority for the states. The CAA has two such clauses. The first details a state’s ability to retain authority. This section allows states to implement and enforce stricter standards than the CAA. However, states cannot “adopt or enforce any emission standard or limitation which is less stringent”⁵⁸ than the national baseline. This is known as a regulatory floor. The second savings clause allows for citizen suits. This section enables individuals to “commence a civil action . . . against any person”

54. *Id.* at 875.

55. *Id.* at 881.

56. *Id.*

57. *Hines v. Davidowitz*, 312 U.S. 52, 67 (1941).

58. 42 U.S.C. § 7416.

who has violated “an emission standard or limitation” or “an order issued by the Administrator or a State . . .”⁵⁹

Whether a federal statute has savings clauses helps to determine whether Congress intended for that act to preempt state law claims—though this is not an established rule. In *Bell v. Cheswick Generating Station*, for example, plaintiffs brought a class action suit against defendant GenOn under state tort law.⁶⁰ 1,500 people composed the class of those who owned or inhabited property near a coal-fired electrical generation facility in Pennsylvania.⁶¹ This case involved the Clean Air Act because plaintiffs complained that ash and other contaminants released from the nearby plant were settling on their properties.⁶² GenOn argued that state tort law claims were preempted by the Clean Air Act and thus “owed no extra duty to the . . . Class.”⁶³ However, the Third Circuit cited a 1987 Supreme Court decision that held that the savings clauses in the Clean Water Act (CWA) preserved a common law nuisance suit and thus precluded the state law claim from preemption.⁶⁴ Using this, the Third Circuit analogized that the savings clauses in the CWA had “no meaningful difference” from those in the CAA⁶⁵ and, therefore, “[did] not preempt state common law claims” either.⁶⁶ Accordingly, the state law claims could proceed. However, the Supreme Court did not grant certiorari on *Bell*. While the Third Circuit championed the rights and remedies of individual citizens in its states, whether the CAA’s savings clauses *always* negate federal preemption remains an open question.

C. *Is there federal preemption by the Clean Air Act?*

While residents of Lincoln County can bring a state common law claim against Jack Daniel’s, outside of the Third Circuit, it is unclear whether the Clean Air Act will automatically preempt those claims or whether state laws can accompany existing federal emissions standards.

Because the CAA does not contain express preemption provisions, the question is whether there is implied preemption. Per the earlier analysis, a court might consider different factors, including field, conflict, impossibility, and obstacle preemption. The CAA’s two savings clauses are evidence of Congressional intent to entrust some authority to the states and their citizens, indicating that there is likely no federal field preemption. Likewise, the CAA’s regulatory floor does not conflict with states’ ability to create and enforce more stringent standards. In fact, creating stricter standards aids Congressional intent to reduce and regulate air pollutants and to safeguard citizens’ health and

59. 42 U.S.C. § 7604.

60. *See Bell v. Cheswick Generating Station*, 734 F.3d 188, 189 (3rd Cir. 2013).

61. *See id.*

62. *See id.*

63. *Id.*

64. *See id.* at 194; *see Int’l Paper Co. v. Ouellette*, 479 U.S. 481 (1987).

65. *Bell*, 734 F.3d at 195.

66. *Id.* at 197.

welfare.⁶⁷ Therefore, it is not impossible to comply with more stringent state regulations. On the contrary, doing so would automatically result in compliance with baseline federal standards. However, as stated earlier, savings clauses are not a guarantee against preemption. It is up to a court to determine whether the abovementioned factors are enough, and the outcome is likely to differ from case to case. The doctrine of implied preemption has evolved over time through a vast body of case law, some of which is explored below.

In *Merrick v. Diageo Am. Supply*, plaintiffs filed state law negligence, nuisance, and trespass suits as well as an injunction against Diageo, a whiskey distillery in Louisville, Kentucky.⁶⁸ Plaintiffs alleged that Diageo was emitting large amounts of ethanol, and similar to Lincoln County, that ethanol was drifting over to nearby property and creating whiskey fungus.⁶⁹ Merrick described the fungus as a “substantial annoyance and unreasonable interference with the use and enjoyment of the property.”⁷⁰ To reach its decision, the Sixth Circuit had to consider whether the Clean Air Act preempted Merrick’s state law claims. The court held that the CAA did not preempt state law for five reasons. First, the court concluded that the savings clauses “expressly preserves the state common law standards.”⁷¹ Second, the court determined that “empowering states to address and curtail air pollution at its source” supported the Act’s purpose.⁷² Third, legislative history showed that Congress did not intend to preempt state common law claims.⁷³ Fourth, the Sixth Circuit relied on *Ouellette* as precedent, agreeing with the Third Circuit’s decision in *Bell* that the states’ rights in the CAA savings clause was “nearly identical” and “analogous” to the CWA.⁷⁴ Finally, and most importantly, the Court acknowledged the “strong presumption against federal preemption of state law,”⁷⁵ especially for cases where “Congress has legislated . . . in a field which the States have traditionally occupied.”⁷⁶ Since the field of environmental regulation is customarily under state control, the Court declared that even without the savings clauses, state claims would likely be preserved under “principles of federalism and respect for states’ rights.”⁷⁷

In *Brown-Forman Corp. v. Miller*, a property owner in Jefferson County, Kentucky also filed a complaint against bourbon distilleries due to ethanol emissions escaping from their aging barrels.⁷⁸ Similar to *Merrick*, these

67. See *Clean Air Act Requirements and History*, U.S. EPA (Aug. 10, 2022), <https://www.epa.gov/clean-air-act-overview/clean-air-act-requirements-and-history#:~:text=Congress%20designed%20the%20Clean%20Air,diverse%20array%20of%20pollution%20sources>.

68. See *Merrick*, 805 F.3d at 689.

69. See *id.* at 686.

70. *Id.* at 687.

71. *Id.* at 690.

72. *Id.* at 691.

73. See *id.*

74. See *id.* at 692.

75. *Id.* at 694.

76. *Medtronic, Inc. v. Lohr*, 518 U.S. 470, 485 (1996).

77. *Merrick*, 805 F.3d at 694.

78. See *Brown-Forman Corp.* 528 S.W.3d at 888.

emissions “promote[d] the growth” of whiskey fungus, and “cause[d] a black film-like substance to proliferate on his property.”⁷⁹ As in *Merrick*, the Kentucky Supreme Court had to make a decision on Clean Air Act preemption. To do so, it took into account the savings clauses and affirmed that “Congress declared that certain types of conflicts between the Act and state law that might otherwise be preempted should, instead, be tolerated.”⁸⁰ The Court also relied on the same reasoning found in *Merrick* to conclude that there was no federal preemption.⁸¹

Finally, *Little v. Louisville Gas & Elec.* is factually similar to *Bell*. Plaintiffs brought suit against Cane Run, a power plant in Louisville, Kentucky, after they began “noticing a persistent film of dust that coated their . . . properties.”⁸² Cane Run was alleging spewing dust and coal ash into the air during its coal burning and cement mixing processes.⁸³ The plaintiffs alleged that the dust, ash, and coal by-products were “not only annoying” but also “composed of dangerous elements.”⁸⁴ Like *Brown-Forman*, this Court relied entirely on *Merrick*’s reasoning, holding that the plaintiff’s state law claims were not “materially distinguishable”⁸⁵ from that case.

CONCLUSION

So, is federal preemption at odds with environmental health? It is clear from *Ouellette*, *Bell*, *Merrick*, *Brown-Forman*, and *Little* that courts seem willing to preserve state authority in environmental regulation, allow state common law actions to proceed, and find that the Clean Air Act generally does not preempt state law. Since Tennessee is within the Sixth Circuit, *Merrick* and *Little* would apply while *Brown-Forman* could be relied on as persuasive authority. If Lincoln County residents brought a state common law claim against Jack Daniel’s in district court, they would arguably have a strong case. Additionally, if a court takes a step further and uses *Bell* to analogize to the CWA’s Savings Clauses to those in the CAA (as the Third Circuit did), then it could rely on *Ouellette* as precedent. In doing so, it could find that the CAA does not necessarily preempt state law claims. This is significant because tort and property claims are necessary and valid tools for communities in the fight against toxic pollution. If citizens can bring these claims forward without concerns of their dismissal, they could hold polluters accountable for their harmful actions, even when they are within legal limits.

However, the aforementioned cases do not bind courts outside of the Third and Sixth Circuits, leaving the majority of states to decide questions of CAA federal preemption on their own. Legal principles and state common law vary

79. *Id.*

80. *Id.* at 891

81. *Id.* at 893 (“We agree and adopt the Sixth Circuit’s analysis as to this issue.”).

82. *Little v. Louisville Gas & Elec. Co.*, 805 F.3d 695, 697 (6th Cir. 2015).

83. *See id.*

84. *Id.*

85. *Id.* at 698.

from state to state. Without firm precedent, the outcomes for similar cases involving environmental pollution issues are uncertain—an alarming consequence as many communities around the country are subject to the environmental and health impacts of big polluters. States that may be more corporation friendly or that heavily rely on polluting industries to generate revenue may prefer and rely on CAA federal preemption. While there is no circuit split—as of now—SCOTUS will ideally grant certiorari on a case involving CAA preemption soon, as it did with the CWA in *Ouellette*. This timely and crucial decision should not be left to individual states and circuits, and most importantly, citizens should not be left to fend for themselves when strange fungi take hold of their towns.