

ARTICLES

WHERE OIL IS KING

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Donald Trump has won the 2016 presidential election, and, based on his campaign rhetoric, it seems reasonable to anticipate that the next four years will see a rollback of federal rules and regulations originally intended to combat climate change and environmental pollution in favor of increased production of fossil fuels, including coal. This raises the question of where we can look for protection of environmental goals, if not to federal law or agencies. Unconventional solutions to energy and environmental issues may be the only way to move forward on environmental challenges in the near term.

This Article suggests one such unconventional solution to the problems presented by the use of hydraulic fracturing (“fracking”). In response to the perceived environmental threats of fracking, many cities and towns have sought to limit it through local bans, moratoria, and regulation. However, in 2015, a number of states passed laws that forbid any city, town, or other municipal body from banning fracking or passing certain regulations on the practice. Further, the highest courts of several other states have ruled that state law preempts local restrictions on fracking. In many cases, this means that local governments must allow fracking, so the question arises as to how these governments can address environmental concerns. This Article is the first to propose that cities and towns where fracking is taking place could incorporate and enforce existing state environmental laws. By doing so, those municipalities may be able to minimize some of the environmental harms associated with fracking. Further, this Article explains why incorporation and enforcement of state-level environmental laws by cities and towns should not be expressly or impliedly preempted.

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INTRODUCTION.....	1633
I. THE FEDERALISM DEBATE: WHO SHOULD REGULATE FRACKING?..	1638
A. <i>Fracking: An Old Technology with a New Twist</i>	1640
B. <i>State and Local Conflicts in Fracking Regulation</i>	1641
C. <i>The Regulatory Landscape of Fracking: Pennsylvania</i>	1643
D. <i>The Regulatory Landscape of Fracking: Texas</i>	1647
II. STATE VERSUS LOCAL CONTROL OF FRACKING	1651
A. <i>How States Control the Regulation of Fracking</i>	1652
B. <i>The Contours of State and Local Government Power</i>	1653
C. <i>Home Rule Cities and Intrastate Preemption</i>	1655
III. PRESERVING LOCAL POWER OVER THE ENVIRONMENTAL IMPACTS OF FRACKING THROUGH ENFORCEMENT OF STATE LAW	1658
A. <i>Enforcement Gaps: When State Environmental Laws Are Strong on Paper but Weak in Application</i>	1658
B. <i>Local Enforcement of State Environmental Regulations</i>	1659
1. Incorporating State Law to Ensure Consistent Enforcement of Environmental Protections	1661
2. Incorporating State Law: Express Preemption.....	1663
3. Incorporating State Law: The Arguments Against Implied Preemption.....	1664
a. <i>Conflict Preemption</i>	1664
b. <i>Field Preemption</i>	1666
C. <i>Additional Policy Considerations Against Preempting Local Environmental Laws</i>	1667
1. Local Adoption of State Laws Is Not Preempted by State Bans on Local Oil and Gas Regulations.....	1667
2. Unlike Most Oil and Gas Regulation, Environmental Protection Is Within Local Police Power	1668
3. Preventing the Adoption of State Laws by Local Governments Through Preemption Erodes the Democratic Process.....	1670
CONCLUSION	1672

INTRODUCTION

There was a time when hydraulic fracturing, or “fracking,” was hailed by the oil and gas industry and by environmentalists as a positive development for the U.S. energy industry. Fracking, it was believed, provided a path toward the sometimes at-odds goals of American energy independence and lowered carbon emissions.¹ From an industry perspective, fracking, combined with horizontal drilling, opened up to exploration new and previously unreachable oil and natural gas shale formations and oil sands. It also boosted domestic production.² Fracking not only made money for companies that engaged in fracking, but it also provided a tremendous boost to U.S. oil production, meaning that we could begin to satisfy our domestic thirst for nonrenewables like oil and natural gas without having to import oil from member states of the Organization of the Petroleum Exporting Countries (OPEC), like Saudi Arabia.³ Early environmental supporters of the technique pointed out that fracking produces an abundance of natural gas, which produces less than half the carbon dioxide emissions of coal and can thus be viewed as a transition fuel, helping to ease the move from fossil fuels to renewable sources of energy.⁴

But the tides of public opinion have turned against fracking.⁵ No longer seen as a possible solution, fracking has come under fire from

1. See, e.g., David B. Spence, *The Political Economy of Local Vetoes*, 93 TEX. L. REV. 351, 355–56 (2015) (noting that fracking has been endorsed by some environmental groups).

2. See *id.* at 354–55 (describing the ways in which fracking coupled with horizontal drilling has caused a sea change in the domestic oil and natural gas industries); see also David B. Spence, *Federalism, Regulatory Lags, and the Political Economy of Energy Production*, 161 U. PA. L. REV. 431, 433–34 (2013).

3. See, e.g., Kenneth Artz, *Fracking Leading to Economic Growth, Rapid Job Creation in North Dakota*, HEARTLAND INST. (Dec. 16, 2014), <https://www.heartland.org/news-opinion/news/fracking-leading-to-economic-growth-rapid-job-creation-in-north-dakota> [<https://perma.cc/4D5L-8J7G>]. OPEC includes oil exporting nations in the Middle East, Africa, and South America. See *Member Countries*, ORG. PETROLEUM EXPORTING COUNTRIES, http://www.opec.org/opec_web/en/about_us/25.htm (last visited Feb. 16, 2017) [<https://perma.cc/T4VH-F63M>].

4. See Wes Deweese, *Fracturing Misconceptions: A History of Effective State Regulation, Groundwater Protection, and the Ill-Conceived FRAC Act*, 6 OKLA. J.L. & TECH., no. 49, 2010, at 1, 4–5; see also Hannah Wiseman, *Regulatory Adaptation in Fractured Appalachia*, 21 VILL. ENVTL. L.J. 229, 231 (2010) (“The quintessential bridge fuel in America may be natural gas, which is abundant and unit-per-unit releases relatively few greenhouse gas emissions when burned, as compared to other traditional fuels such as coal.”); Bjorn Lomborg, *A Fracking Good Story*, SLATE (Sept. 15, 2012), http://www.slate.com/articles/health_and_science/project_syndicate/2012/09/thanks_to_fracking_u_s_carbon_emissions_are_at_the_lowest_levels_in_20_years_.html [<https://perma.cc/622L-U6LE>]; Aaron Task, *Fracking: It’s Good for the Economy . . . AND the Environment*, YAHOO! FIN. (Dec. 12, 2012, 10:53 AM), <http://finance.yahoo.com/blogs/daily-ticker/fracking-good-economy-environment-155325507.html> [<https://perma.cc/RŶC2-ŪP9T>].

5. See, e.g., Robert Rapier, *Fracking Has Been Around Since 1949, Why the Recent Controversy?*, GLOBAL ENERGY INITIATIVE, <http://globalenergyinitiative.org/insights/58-fracking-has-been-around-since-1949-why-the-recent-controversy.html> (last visited Feb. 16, 2017) [<https://perma.cc/788E-XGV5>]. The controversy, at the most basic level, is between adverse effects on human health, wildlife, and the environment allegedly caused by fracking versus its many economic benefits, especially for traditionally poorer rural areas. For

environmental groups and media outlets as the public has focused on the possible threats fracking poses to human health and the environment, particularly after the release of the film *Gasland*,⁶ which included dramatic images of citizens living near fracking operations in Pennsylvania setting their tap water on fire due to high methane content.⁷ Critics have also pointed out that there is still much about the environmental impact of fracking that is not known, especially with respect to the impact of waste disposal, contamination of surface water, and earthquake activity near fracking sites.⁸ Fracking has also garnered opposition from landowners who do not want the sounds and disruptions that accompany fracking—not

contrasting positions on fracking, compare *Fracking*, FOOD & WATER WATCH, <http://www.foodandwaterwatch.org/problems/fracking> (last visited Feb. 16, 2017) (claiming that fracking is too dangerous because of health and environmental concerns and providing multiple resources in support) [<https://perma.cc/8DWJ-A2J5>], with *Pioneering America's Energy Future*, ENERGY FROM SHALE, <http://www.energyfromshale.org/americas-energy> (last visited Feb. 16, 2017) (purporting to explain why “fracking offers good news for America”) [<https://perma.cc/2CB6-66JH>]. This Article does not take a position between these two poles. It should also be noted that, according to a 2013 study by the University of Texas, a majority of Americans who are familiar with fracking also support it. See Steve Brooks, *UT Energy Poll Shows Divide on Fracking*, UT NEWS (Apr. 9, 2013), <http://news.utexas.edu/2013/04/09/ut-energy-poll-shows-divide-on-fracking> (“Just over half of consumers are still not familiar with hydraulic fracturing, commonly called ‘fracking.’ Of those who are, 45 percent support it, while 41 percent oppose it. There’s a similar split over fracking on public lands, with 41 percent wanting to promote the practice and 36 percent to ban it.”) [<https://perma.cc/PS5T-4N6M>].

6. GASLAND (HBO Documentary Films 2010). This film provoked its own miniature controversy as being too one sided and prompted the rebuttal film *FrackNation*, which questions whether the tap water shown as being flammable in *Gasland* might be naturally methane-infused water or “burning springs” that predate fracking. See FRACKNATION (Ann and Phelim Media 2013). As an illustration of the complex politics swirling around fracking globally, the director of *FrackNation*, who is Irish, claims that the International Monetary Fund censored him when they refused to show a clip of his film during his appearance before the group. Andrew Trotman, *Fracking Filmmaker Accuses IMF of Censorship*, DAILY TELEGRAPH (Mar. 21, 2013), <http://www.telegraph.co.uk/finance/newsbysector/energy/9947124/Fracking-film-maker-accuses-IMF-of-censorship.html> [<https://perma.cc/H79X-M2SS>]. According to the director, the IMF was bowing to pressure from Russia, which allegedly sees fracking as a threat to the dominance of its state oil behemoth, Gazprom. *Id.*

7. The Huffington Post review of *Gasland* is an excellent encapsulation of the film’s effect on the public perception of fracking. Stewart Nusbaumer, *Big Sky Doc Film Fest: Gasland Fuel for Justice*, HUFFINGTON POST (Apr. 20, 2010, 5:12 AM), http://www.huffingtonpost.com/stewart-nusbaumer/big-sky-doc-film-fest-emg_b_467605.html [<https://perma.cc/ZC3E-R3WZ>]. After pointing out that the process was pioneered by Halliburton, which was once headed by former Vice President Dick Cheney, the review states:

Gasland addresses Is fracking safe? You want to guess? . . . We see water that can be lit on fire right out of the faucet. We hear from chronically ill residents, all with the same mysterious symptoms, that live next to drilling areas in disparate locations. We feast our eyes on a slew of huge pools of toxic wastes and dead animals—it’s an ugly, deadly mess.

Id.

8. There are over 400 local fracking bans in the United States alone. See Spence, *supra* note 1, at 351–52. With respect to seismic activity, the scientific consensus is that fracking is not causing earthquakes (at least, not any earthquakes of noticeable intensity) but that wastewater injection wells are. See *Induced Earthquakes*, USGS, <http://earthquake.usgs.gov/research/induced/myths.php> (last visited Feb. 16, 2017) [<https://perma.cc/87J8-LJYN>].

to mention the “boomtown” explosion of road construction and the influx of oil workers—to mar their neighborhoods.⁹ Even communities that once welcomed fracking operations as an economic boon have struggled with the associated costs, including building roads to allow large trucks to transport well and drill parts and constructing storage facilities for fracking fluid and proppant.¹⁰

In addition to the political and environmental controversies that surround it, fracking is also of particular interest to energy scholars because of its unique position in the fragmented world of U.S. energy regulation.¹¹ Although most energy sources such as coal, hydropower, and nuclear power are overseen by a collection of federal, state, and local actors, fracking is subject to little federal oversight and inconsistent state regulation—and as such, it is, in many ways, the Wild West of energy production, with the only real limits being those imposed by communities and by states.¹² Some have also argued that, in states where the oil and gas industry is powerful like Texas and Oklahoma the only ones actually regulating fracking are the oil and gas industries themselves.¹³

Perhaps in part because fracking is not comprehensively regulated, a compelling body of literature has developed on the issue of local authority over fracking—specifically, whether and why local bans and restrictions on fracking are positive developments.¹⁴ Thus far, the majority of scholars have weighed in favor of power for local governments to ban or regulate

9. See, e.g., Dan Solomon, *ExxonMobil CEO Doesn't Want a Fracking Operation Near His Backyard*, TEX. MONTHLY (Feb. 25, 2014), <http://www.texasmonthly.com/daily-post/exxonmobil-ceo-doesnt-want-fracking-operation-near-his-backyard> [<https://perma.cc/4245-ZXYW>]. Note that Denton did pass a fracking ban, which led the Texas legislature to pass H.B. 40, one of the laws that spurred this Article. See H.B. 40, 84th Leg., Reg. Sess. (Tex. 2015); see also *Texas Stops Cities and Towns from Banning Fracking*, BBC, (May 19, 2015), <http://www.bbc.com/news/world-us-canada-32805973> [<https://perma.cc/EW53-BMA8>].

10. See Spence, *supra* note 1, at 367–68.

11. See James W. Coleman, *Importing Energy, Exporting Regulation*, 83 FORDHAM L. REV. 1357, 1358–59 (2014) (noting that the failure of the federal government to pass comprehensive energy regulations has forced the states to take the lead); Hari M. Osofsky & Hannah J. Wiseman, *Dynamic Energy Federalism*, 72 MD. L. REV. 773, 778 (2013) (describing the regulatory picture of energy in the United States as fractured, noting “patterns of inadequate regulatory authority; simultaneous overlap and fragmentation; and entities in public regulatory roles enmeshed with, and at times partially made up of, the private actors that they ostensibly regulate across numerous types of energy law”).

12. See, e.g., Tim McDonnell and James West, *It's the Wild F*ing West out There*, MOTHER JONES (Nov.–Dec. 2012), <http://www.motherjones.com/environment/2012/11/fracking-safety-north-dakota> [<https://perma.cc/6893-DGFM>].

13. See David A. Dana & Hannah J. Wiseman, *A Market Approach to Regulating the Energy Revolution: Assurance Bonds, Insurance, and the Certain and Uncertain Risks of Hydraulic Fracturing*, 99 IOWA L. REV. 1523, 1555 (2014). Note that Professors Dana and Wiseman refute this view, stating that the regulators they encountered were not simply beholden to the oil and gas industry. See *id.* at 1555 n.130.

14. See, e.g., Spence, *supra* note 1, at 376–84; Hannah J. Wiseman, *Governing Fracking from the Ground Up*, 93 TEX. L. REV. SEE ALSO 29, 34–36 (2015); see also Joshua P. Fershee, *How Local Is Local?: A Response to Professor David B. Spence's The Political Economy of Local Vetoes*, 93 TEX. L. REV. SEE ALSO 61, 63–74 (2015) (looking more specifically at the success of local bans in surviving legal challenges).

fracking operations.¹⁵ Increasingly, however, states with significant existing fracking operations are growing impatient with local bans and restrictions on fracking, which is not surprising given the enormous economic boost fracking can provide—both to localities in the short term and to the state in the longer term.¹⁶ What is missing from the conversation is what cities and towns may do to regulate or otherwise put limits on how and where fracking takes place when they do not have the option of banning fracking outright. This is an important question because fracking, perhaps above all other extractive techniques, has serious impacts on local communities.

However, there is a growing rift between state and local governments over fracking. Leading what appears to be a burgeoning state movement to prohibit local fracking bans altogether and curtail local regulations are Texas, Oklahoma, and North Carolina. In early 2015, Texas and Oklahoma passed House Bill 40¹⁷ (H.B. 40) and Senate Bill 809¹⁸ (S.B. 809), respectively. North Carolina followed with Senate Bill 119 (S.B. 119) in late September of 2015.¹⁹ All three laws claim that state regulation of oil and gas preempts²⁰ local laws and regulations and that municipal governments may not enact stricter regulations on the industry than those imposed by state law.²¹ H.B. 40 goes a step further in prohibiting cities and towns from passing regulations that would prohibit fracking or make it “commercially [un]reasonable.”²² Although supporters argue that these laws are necessary to protect the rights of private property owners who are deprived of the money that they might receive from fracking on their property by local bans,²³ the laws go much further. Additionally, recent

15. *See supra* note 14.

16. In Texas, for example, five of the state’s cities were among the top fifteen places in the United States to recover from the 2008 recession, and, of those five, three—Midland, Odessa, and Laredo—can attribute their success to fracking. *See* Julie Verhage, *Here Are the 15 Cities That Have Done the Best (and the Worst) Since the Recession*, BLOOMBERG (June 22, 2015), <http://www.bloomberg.com/news/articles/2015-06-22/here-are-the-15-cities-that-have-done-the-best-and-the-worst-since-the-recession> [<https://perma.cc/7VEC-HGRR>]. This is true even though a decline in dry gas (including natural gas) prices has led to a slowdown in fracking and other oil and gas operations associated with dry gas production, although note there has not been a similar slowdown in oil and gas liquids (such as propane and ethane) production. *See id.*

17. *See* H.B. 40, 84th Leg., Reg. Sess. (Tex. 2015).

18. *See* S.B. 809, 55th Leg., 1st Sess. (Okla. 2015). The Oklahoma law also gives the state exclusive jurisdiction over wastewater wells, which have been found to be responsible for increased seismic activity. *Id.*

19. *See* S.B. 119, Gen. Assemb., Reg. Sess. (N.C. 2015).

20. As discussed more fully in Part I, H.B. 40 specifically reads that the State of Texas has occupied the field of oil and gas regulation, even though Texas does not in fact comprehensively regulate oil and gas. *See* David E. Pierce, *Developing a Common Law of Hydraulic Fracturing*, 72 U. PITT. L. REV. 685, 691 (2011).

21. *See* N.C. S.B. 119; Okla. S.B. 809; Tex. H.B. 40.

22. Tex. H.B. 40. The Oklahoma law, on the other hand, does specifically reserve for municipalities the power to use zoning, setback requirements, and other traditional local regulations to protect the health and welfare of its citizens. *See* Okla. S.B. 809.

23. *See* Wade Goodwyn, *New Texas Law Makes Fracking Bans Illegal*, NPR (May 20, 2015), <http://www.npr.org/2015/05/20/408156948/new-texas-law-makes-local-fracking-bans-illegal> (including the comment made by Todd Staples, president of the Texas Oil and

court decisions in Louisiana and Colorado striking down local moratoria on fracking suggest that many cities and towns must live with the reality of fracking within their communities.²⁴

This Article acknowledges that there are benefits to state control that justify the state as the first line in fracking regulation.²⁵ In particular, state-level regulation promotes intrastate consistency in the law, at least from the perspective of compliance (although the lack of federal regulation means there is no such consistency across the states, and it is arguable whether allowing states to control oil and gas regulation has led to a race to the bottom, where residents of states that depend heavily on the energy industry bear more of the fracking burden).²⁶ However, if a state assumes such control, it places itself in the position of being the only governmental body overseeing the oil and gas industry. This, in turn, places the burden on the state to ensure that the industry addresses negative externalities imposed upon the state, particularly with respect to potential harm to local air and water quality. Because many states are not equipped to deal with the environmental challenges posed by fracking at the city and town level, it makes sense to give these municipal governments an expanded role in addressing those challenges.

This Article argues that if states does not or cannot ensure compliance with their environmental regulations, cities and towns may be able to do it for them. Further, taking this route should not raise state preemption concerns because the cities are not passing regulations that are inconsistent with, or in excess of, state law. Indeed, states already do the same thing when they pass laws to enforce federal regulation, a practice the U.S. Supreme Court has permitted.²⁷ Additionally, this Article addresses the other important policy goals that would be furthered if local governments were permitted to incorporate and enforce state environmental laws,

Gas Association, that “[i]f a city wants to stop an activity, you know, our Constitution protects the rights of property owners. And they just need to pay them for that, but this [city of Denton fracking] ban did not allow that”) [<https://perma.cc/2ER4-CTTT>].

24. See *City of Fort Collins v. Colo. Oil & Gas Ass’n*, 369 P.3d 586, 594 (Colo. 2016); *St. Tammany Parish v. Welsh*, 199 So. 3d 3 (La. Ct. App. 2016).

25. As a practical matter, there is no “silver bullet” that would restore the ability of municipalities in all states to ban fracking. Under preemption and federalism principles, either the federal or state governments will have primary authority over the regulation of oil and gas in a broad sense, and municipalities will not be able to enact conflicting laws or regulations. It is the position of this Article that approaching the problem of what powers a municipality does have with respect to oil and gas should be based on the current reality of regulation of oil and gas by the states. Although several authors have made compelling cases for federal control of oil, gas, and fracking in particular, there are several reasons why this is not likely in the foreseeable future. These reasons are discussed in detail in Part II.

26. This author believes that loopholes in federal environmental laws that exempt fracking should be closed, but, as discussed in Part I, the environmental problems that fracking can cause are just one reason why the process is so controversial. The other reason is the serious impact on the quality of life of residents located near fracking sites. This Article argues that only local governments can adequately respond to such uniquely local concerns.

27. See, e.g., *Huron Portland Cement Co. v. City of Detroit*, 362 U.S. 440 (1960).

including retaining the benefits of the federalist system and increasing citizen confidence in the democratic process.

Part I examines the uneven regulatory landscape of fracking, provides an overview of the fracking process, and examines how the role of local governments differs in two states: (1) Pennsylvania, which has an uneasy mixture of state and local control, including state attempts to override local bans, and (2) Texas, which did not enact a single city-wide ban on fracking until late 2014, prompting the passage of H.B. 40 only months later.²⁸ Part II provides a historical overview of the state's role in the evolution of oil and gas regulations generally and provides a broad overview of the uncertainty surrounding state-local power structures, as well as when and how the doctrine of preemption has been used by states to strike down local ordinances. Part III argues that local governments—particularly those in states that have banned local regulation of the oil and gas industry—should incorporate and enforce state environmental regulations. Doing so avoids preemption issues and furthers important policy goals.

I. THE FEDERALISM DEBATE: WHO SHOULD REGULATE FRACKING?

The regulation of energy sources in the United States is complex, with different local, state, and federal agencies governing different aspects of energy extraction, production, pricing, and consumption. To make matters even more complicated, the makeup of regulatory actors also changes depending on the energy source.²⁹ With respect to oil and gas, regulation has traditionally been a state matter, but the reality is more complex.³⁰ The various actors taking part in the regulation of oil and gas today can be likened to the layers of an onion: at the federal layer, there are regulations for the control of emissions and the protection of wildlife and the environment;³¹ at the state layer, approval of applications to frack or drill are made; at the local layer, cities and towns regulate by way of zoning and setback requirements, which allows them to exercise some control over where and how the drilling takes place.³² Some states have clashed with local governments over the latter's regulations and have argued that state laws preempt local regulations, either expressly or by occupying the field.³³

28. See Aleem Maqbool, *The Texas Town That Banned Fracking (and Lost)*, BBC (June 16, 2015), <http://www.bbc.com/news/world-us-canada-33140732> [<https://perma.cc/TN64-SA7Y>].

29. See Osofsky & Wiseman, *supra* note 11, at 778–79.

30. See Spence, *supra* note 1, at 369–70 (noting that “[r]egulation of onshore oil and gas production has traditionally been a state matter, and producing states have statutes in place to regulate oil and gas production,” but noting that federal regulation and local bans on fracking are also in play).

31. See Osofsky & Wiseman, *supra* note 11, at 778. Although, as discussed below in Part I, fracking is not subject to federal environmental laws.

32. See Hannah J. Wiseman, *Coordinating the Oil and Gas Commons*, 2014 BYU L. REV. 1543, 1547–53.

33. See *id.* Even states that allow local zoning ordinances require state-level permitting to proceed with drilling operations. See Hannah J. Wiseman, *The Capacity of States to Govern Shale Gas Development Risks*, 48 ENVTL. SCI. & TECH. 8376, 8379–81 (2014). On

While these layers might suggest that regulation of fracking is comprehensive, that is not the case. Regulatory dynamics between states and local governments vary, and, as Professors Hari Osofsky and Hannah Wiseman have pointed out, there are serious gaps in the regulation of oil and gas extraction, including drilling, that have yet to be adequately addressed by any regulatory body.³⁴ Further, some existing federal regulations, including the Safe Drinking Water Act, do not cover fracking, which raises the question of whether the Environmental Protection Agency (EPA) should take steps to more comprehensively address fracking or whether state environmental agencies can adequately address those gaps.³⁵

Despite the proliferation of fracking wells in recent years, no clear answer on who should regulate each part of the process has developed. To some extent, this may be a product of our national failure to decide where our priorities should lie—i.e., whether economics trumps environment or vice versa. Indeed, it has been observed that opinions on whether federal or state governments should assume control of fracking may be politically motivated.³⁶ As Professor Michael Burger stated, “Those who envision private profit and the expansion of American power tend to favor state regulation. Those who fear environmental and public health risks, along with the perpetuation of the fossil fuel economy, tend to favor federal regulation.”³⁷ While this may be an oversimplification, there is no question that the regulation of fracking is a politically charged issue. And, as noted above, there is recent literature that advocates for local regulation (usually in the form of vetoes or bans) of fracking over both state and federal control.³⁸

To better understand how local and state regulations of fracking interact, it is useful to understand what fracking is and how varied the dynamics between state and local regulations are from state to state. The following part will address both of these issues and will also compare the results of

the federal front, fracking has raised concerns about impacts on threatened species. Interestingly, it is not always the fracking process itself that causes the greatest environmental impact; just as potentially destructive is the construction of access roads to the drilling pad and waste disposal areas. See Kalyani Robbins, *Awakening the Slumbering Giant: How Horizontal Drilling Technology Brought the Endangered Species Act to Bear on Hydraulic Fracturing*, 63 CASE W. RES. L. REV. 1143, 1152–64 (2013).

34. See Osofsky & Wiseman, *supra* note 11, at 778.

35. Many scholars have argued for greater federal regulation of fracking, particularly by including it in relevant environmental statutes. See, e.g., Michael Burger, *Fracking and Federalism Choice*, 161 U. PA. L. REV. ONLINE 150, 159–63 (2013); Angela C. Cupas, *The Not-So-Safe Drinking Water Act: Why We Must Regulate Hydraulic Fracturing at the Federal Level*, 33 WM. & MARY ENVTL. L. & POL’Y REV. 605, 606–09 (2009); Hannah Wiseman, *Untested Waters: The Rise of Hydraulic Fracturing in Oil and Gas Production and the Need to Revisit Regulation*, 20 FORDHAM ENVTL. L. REV. 115, 182–87 (2009) (arguing that the federal government should regulate fracking under the Safe Drinking Water Act).

36. See Michael Burger, *The (Re)federalization of Fracking Regulation*, 2013 MICH. ST. L. REV. 1483, 1486. Burger himself suggests a hybrid federal-state regulatory model. See *id.* at 1486–87.

37. *Id.* at 1486.

38. See *supra* note 14.

two states' moves to preempt local regulation of fracking: Pennsylvania, where a state challenge to local bans failed, and Texas, a state that has recently passed legislation intended to preempt local bans and regulations.

A. Fracking: An Old Technology with a New Twist

Fracking itself is not a new technology.³⁹ The process was first used in 1947 in Kansas and quickly became widespread—according to the Geological Society of America, there are over a million wells throughout the country that were drilled using fracking and traditional vertical drilling, meaning that the drill is pointed downward during the entire process of drilling the well.⁴⁰ Although there are several fracking methods, all have certain features in common. During fracking, as the well is being drilled, millions of gallons of water mixed with an assortment of chemicals and sand or ceramic beads called “proppant”⁴¹ are injected into the ground to fracture or expand fractures in the shale and reach the impacted oil and gas—this cocktail of water, chemicals, and proppant is known as “fracking fluid.”⁴² The fracking fluid can vary in consistency from water to gel, and may contain chemicals ranging from methanol acid to diesel fuel (although some companies have informally agreed not to use the latter).⁴³ Companies are not required by federal law to reveal the chemical makeup of the fracking fluid they use (although many states do require such disclosures), which may contribute to some local resistance to the process.⁴⁴

Fracking can be thought of as using the highly pressurized water to make cracks in the shale or tight sands in a similar fashion as a rock hitting a windshield. Once the cracks have opened, the fracking fluid flows into those cracks to hold them open.⁴⁵ Then, when the water is removed from the well, the change in pressure causes the oil and any associated natural gas to flow from the cracks up the wellbore, or the channel made by the drill.⁴⁶ When this process was eventually combined with horizontal drilling, a boom was born—vast resources of oil and natural gas that were

39. See *Just the Facts*, ENERGY DEPTH, <https://energyindepth.org/just-the-facts/> (last visited Feb. 16, 2017) [<https://perma.cc/4Z9K-T9LF>].

40. *Id.*

41. The chemicals used in fracking water have evolved over time, especially in the 1980s and 1990s, with an emphasis on “operational efficiency rather than . . . potential environmental or human health impacts.” U.S. ENVTL. PROT. AGENCY, EPA 816-R-04-003, EVALUATION OF IMPACTS TO UNDERGROUND SOURCES OF DRINKING WATER BY HYDRAULIC FRACTURING OF COALBED METHANE RESERVOIRS 4-1 (2004). The impact of water-based fracturing drilling fluid storage and waste is discussed in more depth in Part II.

42. *See id.*

43. *See* Wiseman, *supra* note 35 at 118–19 (offering a more comprehensive overview of the technical aspects of fracking, including the concerns over chemicals used in fracking fluid).

44. *See* Cupas, *supra* note 35, at 605–07. The EPA did promulgate a notice of proposed rulemaking to consider whether fracking fluid should be regulated under the Toxic Substances Control Act, but a final rule has not been released. *See Natural Gas Extraction—Hydraulic Fracturing*, EPA, <https://www.epa.gov/hydraulicfracturing> (last visited Feb. 16, 2017) [<https://perma.cc/2ZNE-JRNE>].

45. *See* Wiseman, *supra* note 35, at 120.

46. *See id.*

previously unreachable because of the low permeability of shale and tight sands suddenly became accessible.⁴⁷ It should be noted, however, that fracking is used to access oil and gas in shale formations; once that access has been created, the well becomes conventional. In other words, fracking is not the entire life of a well, only its birth. Once a well has been fracked, pulling the oil and gas out is done in the same manner as any other type of well.

Despite the fact that fracking is only one stage of extracting oil and gas from a shale play, it is not a small or isolated process. Even compared to conventional drilling operations, it is an expensive, loud, and disruptive activity that increasingly takes place near residential areas.⁴⁸ As discussed above, while there are significant gaps in fracking regulation on a national scale, state governments do regulate many aspects of the process, from granting permits to minimizing air pollution to the cleanup and disposal of wastewater.⁴⁹

While some states delegate many of these functions to oil and gas or railroad commissions, other states have moved those duties to state environmental agencies.⁵⁰ The traditional emphasis for most state oil and gas laws has been promoting the industry and making the acquisition of mineral rights more efficient, but local concerns over health and the environment have prompted some states to pass fracking-specific regulations.⁵¹ And there are certainly many communities that have welcomed fracking and the economic effects it brings, especially in rural, economically depressed areas.⁵² However, other communities and larger, denser cities have not been so welcoming.

B. State and Local Conflicts in Fracking Regulation

One of the major reasons why fracking has become such a political flash point is because of the enormous impact that fracking operations have on nearby communities and the fear of drinking water contamination by fracking fluid. Even more than many conventional oil wells⁵³ and some

47. *See id.* at 120–23.

48. *See id.* at 123–28.

49. *See* Osofsky & Wiseman, *supra* note 11, at 777–79.

50. *See* Spence, *supra* note 1, at 368–69.

51. *See id.* at 368–71.

52. *See id.*; *see also* DANIEL RAIMI & RICHARD NEWELL, DUKE UNIV. ENERGY INITIATIVE, SHALE PUBLIC FINANCE: LOCAL GOVERNMENT REVENUES AND COSTS ASSOCIATED WITH OIL AND GAS DEVELOPMENT (2014) (studying the costs and benefits of the fracking boom and concluding that “the net impact of recent oil and gas development has generally been positive for local public finances,” except for some areas in the Bakken Shale); Wiseman, *supra* note 35, at 121–27.

53. It is true that some enhanced oil recovery techniques used in conventional oil and gas recovery can be much more complex undertakings than a traditional oil drilling platform or pump jack, but one aspect of fracking that sets it apart from other well stimulation techniques is the need for millions of gallons of water, which must be stored, transported, and disposed of. *See* Wiseman, *supra* note 35 at 118–19, *Enhanced Oil Recovery*, ENERGY.GOV, <https://www.energy.gov/fe/science-innovation/oil-gas-research/enhanced-oil-recovery> (last visited Feb. 16, 2017) [<https://perma.cc/3YNU-SXPN>].

types of enhanced oil recovery methods, fracking is a major undertaking that involves heavy truck traffic, very loud noises (both while the well pad is being constructed and during the fracking process itself), the installation of infrastructure to process and transport natural gas, scores of new workers who need housing and services, and millions of gallons of water that must be transported, stored, and disposed of.⁵⁴ Even if it were possible to make the direct environmental threats of fracking—including the possibility of drinking water contamination and the release of carbon dioxide and methane—vanish overnight, fracking would still be controversial because of the incidental environmental effects that light, noise, and truck exhaust can have on the quality of life of residents who live, work, and go to school near well sites.⁵⁵

It is presently impossible to make the direct environmental effects of fracking vanish or, indeed, to address them comprehensively. This is both because approaches to regulating the environmental effects of fracking vary widely from state to state and because, even when a state does have strong environmental laws, those laws are not always enforced.⁵⁶ This Article specifically addresses the problems faced by cities and towns within states that forbid local fracking bans and do not effectively enforce existing environmental protections.

In some ways, there are two Americas when it comes to fracking: the America that forbids fracking altogether or permits local bans on the practice, which includes states like New York, Vermont, Maryland, California, and Pennsylvania, and the America that welcomes fracking, which includes states like Texas, Oklahoma, Louisiana, North Carolina, Ohio, and Colorado, where state law limits what cities and towns may do to regulate fracking operations.⁵⁷ In the latter America, legal challenges to local bans or ordinances citing federalism tend to come out in the state's

54. For a vivid description of how a town (here Dimock, Pennsylvania) can be affected by fracking, see Christopher Bateman, *A Colossal Fracking Mess*, VANITY FAIR (June 2010), <http://www.vanityfair.com/news/2010/06/fracking-in-pennsylvania-201006> [<https://perma.cc/U296-G9S6>].

You don't need to drive around Dimock long to notice how the rolling hills and farmland of this Appalachian town are scarred by barren, square-shaped clearings, jagged, newly constructed roads with 18-wheelers driving up and down them, and colorful freight containers labeled "residual waste." Although there is a moratorium on drilling new wells for the time being, you can still see the occasional active drill site, manned by figures in hazmat suits and surrounded by klieg lights, trailers, and pits of toxic wastewater, the derricks towering over barns, horses, and cows in their shadows.

Id.

55. In this way, objections to fracking are similar to those concerning mountaintop removal mining. *See infra* Part II.

56. For an excellent overview on how states vary in their regulatory approaches to oil and gas and seem to rarely engage in sharing information on the efficacy of these approaches with one another, see Hannah J. Wiseman, *Regulatory Islands*, 89 N.Y.U. L. REV. 1661, 1679–86 (2014).

57. *See* Spence, *supra* note 1, at 371–73. Note that the bans in Vermont and Maryland seem to be largely symbolic, since there are no significant shale formations in either state that would attract fracking activities. *See* Shannon M. Roesler, *Federalism and Local Environmental Regulation*, 48 U.C. DAVIS L. REV. 1111, 1166–67 (2015).

favor, thanks to extensive state regulations and an economy that is dependent, to some extent, on oil and gas.⁵⁸

As Professor David B. Spence has pointed out, several states, including Louisiana and Colorado, have seen local bans fail to gain traction due to strong state laws that preempt the field of oil and gas, including local vetoes on extraction processes.⁵⁹ When state oil and gas laws expressly preempt or occupy the field—that is, regulate oil and gas so comprehensively that there is nothing left for local governments to govern—local regulation or bans on fracking may not be possible or even desired.⁶⁰

What is different about laws like H.B. 40, S.B. 809, S.B. 119, and proposed laws in Indiana,⁶¹ New Mexico,⁶² Kansas,⁶³ Florida,⁶⁴ and Colorado⁶⁵ is that they represent what appears to be a concerted effort by states to expressly prohibit bans on fracking, even if such bans are what local residents desire. Also, as discussed in more detail below, some of these laws seek to prohibit certain types of regulations that are traditionally within the power of local governments, especially home rule cities, when they adversely impact fracking and other extractive techniques.⁶⁶ The solution proposed in this Article, however, does not require state control over oil and gas—rather, it provides a way for *any* locality to assert more environmental oversight where fracking is taking place. To illuminate the difference in state regulations over local control of oil and gas, it is useful to look at two states, Pennsylvania and Texas, where such regulations had very different results.

C. The Regulatory Landscape of Fracking: Pennsylvania

Pennsylvania has a long relationship with the energy industry. That legacy began with the 1775 discovery of anthracite coal in the northeastern part of the state (which would later come to be known, appropriately, as “the Coal Region”).⁶⁷ By 1860, commercial mines in the Coal Region were producing and shipping coal all over the country.⁶⁸ By the dawn of the

58. See Spence, *supra* note 1, at 371–73.

59. See *id.* (detailing the various types of preemption—express, field, and conflict—that have been used to strike down local bans and some regulations of fracking); see also *City of Fort Collins v. Colo. Oil & Gas Ass’n*, 369 P.3d 586, 594 (Colo. 2016); *St. Tammany Parish v. Welsh*, 199 So. 3d 3 (La. Ct. App. 2016).

60. See Spence, *supra* note 1; see also Wiseman, *supra* note 35, at 157–68.

61. See H.B. 1299, 118th Gen. Assemb., 2d Reg. Sess. (Ind. 2014).

62. See S.B. 421, 52d Leg., 1st Sess. (N.M. 2015).

63. See S.B. 245, 2013 Leg., Reg. Sess. (Kan. 2013).

64. See H.B. 1205, 2015 Leg., Reg. Sess. (Fla. 2015).

65. See H.B. 1119, 70th Gen. Assemb., 1st Reg. Sess. (Colo. 2015).

66. As discussed in more detail in Part II, when a state constitution designates cities over a certain population as being home rule cities, the only limits placed on what those cities may do with respect to local regulation are where the state has specifically stated that the cities *may not* regulate. See generally Uma Outka, *Intrastate Preemption in the Shifting Energy Sector*, 86 U. COLO. L. REV. 927 (2015) (providing an in-depth analysis of state and local power sharing with respect to renewable energy development).

67. JOHN STUART RICHARDS, *EARLY COAL MINING IN THE ANTHRACITE REGION* 7 (2002).

68. See *id.*

twentieth century, the state's population had exploded, especially in the northeast, and "area mines were producing fully 57 million tons of anthracite coal annually."⁶⁹

But a mere two decades later, the economic boom provided by the Coal Region was fading. Anthracite, an extremely high carbon form of coal that is difficult to ignite and is much more expensive than lower-carbon bitumen or lignite coal, began to decline in popularity at the beginning of the twentieth century.⁷⁰ While anthracite was suitable for heating small residential spaces, the demand was now for very high quantities of cheaper, lower-carbon coal to provide larger-scale steam-electric power generation.⁷¹

Additionally, all types of coal now faced serious competition from oil and gas, which were increasingly replacing coal as the fuel of industrial engines because they were easier to transport. The advantage of oil was particularly dramatic with respect to ships and locomotives, which had for decades required men to shovel the coal into boilers.⁷² The decline of the Coal Region, coupled with the steel crisis of the 1970s and the larger national trend of a shrinking manufacturing sector, put large parts of Pennsylvania in bleak economic circumstances through much of the rest of the century.⁷³

Although the predominance of coal as the energy source of choice during the Industrial Revolution made the Coal Region an economic powerhouse during the nineteenth and early twentieth centuries, Pennsylvania is also the birthplace of oil and gas drilling. Prior to the 1850s, petroleum had been harvested in Pennsylvania from oil seeps, or surface oil, by dragging cloth through the substance and then wringing it out.⁷⁴ But then, a Pennsylvania entrepreneur named Samuel Kier began keeping the petroleum that welled up during the drilling of his salt mines and experimenting with possible uses of the substance.⁷⁵

Kier subsequently founded the first oil refinery in 1859 to convert petroleum to kerosene for use in lamps. Around the same time, George

69. THOMAS DUBLIN & WATER LICHT, *THE FACE OF DECLINE: THE PENNSYLVANIA ANTHRACITE REGION IN THE TWENTIETH CENTURY* 1–3 (2005).

70. *Id.*

71. *Id.* at 3. To get an idea of how much coal was needed during the Industrial Age, the RMS Titanic had three engines powered by twenty-nine boilers that required over 600 tons of coal a day. See ANTON GILL, *TITANIC: THE REAL STORY OF THE CONSTRUCTION OF THE WORLD'S MOST FAMOUS SHIP* 147–48 (2012). That coal, in turn, had to be shoveled continuously by hand around the clock into the boilers. See *id.* When she sank, the Titanic had over eight thousand tons of coal in her holds. See *id.*

72. See DUBLIN & LICHT, *supra* note 69, at 3; see also DANIEL YERGIN, *THE PRIZE: THE EPIC QUEST FOR OIL, MONEY, AND POWER*, at xiv–xv (1990) (detailing Winston Churchill's decision to switch the vessels of the British Navy from coal power to oil in part because of the manpower required to shovel coal).

73. See DUBLIN & LICHT, *supra* note 69, at 3–4; see also STEVEN C. HIGH, *INDUSTRIAL SUNSET: THE MAKING OF NORTH AMERICA'S RUST BELT, 1969–1984* (2003).

74. See YERGIN, *supra* note 72, at 9.

75. HILDEGARDE DOLSON, *THE GREAT OILDORADO: THE GAUDY AND TURBULENT YEARS OF THE FIRST OIL RUSH: PENNSYLVANIA, 1859–1880*, at 80 (1959).

Bissell founded the Pennsylvania Rock Oil Company and, inspired by Kier's capture of oil by drilling for salt, began drilling for just the oil in the western part of the state.⁷⁶ Bissell struck oil using the drilling method in 1859, and the nation's first oil rush was ignited.⁷⁷ By 1891, Pennsylvania "produced 31 million barrels of oil, 58 percent of the nation's oil that year."⁷⁸ But other states soon began to surpass Pennsylvania in terms of oil output, and by 1907, the boom was over and production in the state had stabilized.⁷⁹

Pennsylvania is also one of the birthplaces of the modern fracking boom. After the combination of the technique with horizontal drilling was perfected in Texas's Barnett Shale, it was quickly exported to the largest shale play in the United States, the Marcellus Shale in Pennsylvania.⁸⁰ Following the oil crisis of the 1970s, the U.S. Department of the Interior funded research into mapping shale plays across the country that held vast reservoirs of oil and gas that could not be reached using conventional drilling methods.⁸¹ One of the larger shale formations identified by geologists was the enormous Marcellus Shale, which stretches over 95,000 square miles from Virginia to New York along the Appalachian Basin (the Marcellus's sheer size and location is behind its nickname, the "Beast in the East").⁸²

Fracking yielded dramatic results in the region in a very short time. The first well in Pennsylvania (and the Marcellus) using horizontal drilling and fracking was sunk in 2003. By the end of 2011, hundreds of millions of cubic feet of natural gas were being produced by fracking from the Marcellus Shale, and at least fifteen major interstate pipelines were in various stages of approval by the Federal Energy Regulatory Commission (FERC).⁸³ But the economic benefits that initially thrilled Pennsylvanians began to dim in the face of some of the negative local impacts of fracking, including increased truck traffic, a lack of affordable housing when oil industry employees snapped up rentals, and the strain put on local services by a rapidly growing population.⁸⁴ Environmental concerns over the effect

76. *See id.*

77. *See id.*

78. *See id.*

79. *See id.* at 87.

80. Hannah Wiseman, *Regulatory Adaptation in Fractured Appalachia*, 21 VILL. ENVTL. L.J. 229, 231–34 (2010).

81. John A. Harper, *The Marcellus Shale—An Old “New” Gas Reservoir in Pennsylvania*, 38 PA. GEOLOGY, Spring 2008, at 2, 3–5; Ross H. Pifer, *What a Short, Strange Trip It's Been: Moving Forward After Five Years of Marcellus Shale Development*, 72 U. PITT. L. REV. 615, 621 (2011); *see also* DAVID A. WAPLES, *THE NATURAL GAS INDUSTRY IN APPALACHIA: A HISTORY FROM THE FIRST DISCOVERY TO THE TAPPING OF THE MARCELLUS SHALE* 280 (2012).

82. WAPLES, *supra* note 81, at 80.

83. *Id.*; *see also* Pifer, *supra* note 81, at 621 ("Following the drilling of the Renz #1 well, the number of Marcellus wells drilled in Pennsylvania each year began to increase at an exponential rate—two wells were drilled in 2005, eleven in 2006, thirty-four in 2007, 210 in 2008, 768 in 2009, and 1,454 in 2010. Thus, by the end of 2010, a total of approximately 2,500 Marcellus wells had been drilled in Pennsylvania.")

84. Pifer, *supra* note 81, at 625.

of fracking on drinking water and air quality also began to grow, particularly after the 2009 release of the documentary *Gasland*.⁸⁵

Local regulations and bans on fracking began to gain popularity, and state officials responded in 2012 by enacting an amendment to the Pennsylvania Oil and Gas Act, known as “Act 13.”⁸⁶ One of the provisions of Act 13 was chapter 33, which “prohibit[ed] any local regulation of oil and gas operations, including via environmental legislation, and require[d] statewide uniformity among local zoning ordinances with respect to the development of oil and gas resources.”⁸⁷ This provision of Act 13 was to go into effect sixty days after the legislation was passed.⁸⁸ Between the time Act 13 was passed and the date it was to go into effect, a group of plaintiffs, including several counties, boroughs, and townships, filed suit in *Robinson Township v. Pennsylvania*.⁸⁹ The plaintiffs argued that Act 13 violated several provisions of the state constitution, including due process and article 1, section 10 on the “inherent rights of mankind.”⁹⁰ The lower court agreed that the provision was unconstitutional.⁹¹

The Supreme Court of Pennsylvania agreed with the lower court that certain provisions of Act 13, including chapter 33, violated state citizens’ right to due process because it required the changing of local zoning laws “without regard for basic zoning principles and, thereby, failing to protect interests of property owners from harm and altering the character of neighborhoods.”⁹² The court noted with approval the lower court’s observation that “local government . . . relies on public input to produce a rational plan of development.”⁹³ The court continued, “Act 13 requires municipalities to act affirmatively to allow incompatible uses [in residential neighborhoods] such as ‘drilling operations and impoundments, gas compressor stations, storage and use of explosives’ in all zoning districts.”⁹⁴

The court rejected Pennsylvania’s contention that the sudden change in local zoning laws was reasonably related to its police power, citing the lower court’s finding that the purpose of Act 13’s usurpation of local zoning power could only be justified “if compliant with the comprehensive plan of the community.”⁹⁵ Because Act 13 was not compliant, it was not reasonably related to the state’s police power.⁹⁶ Thus, the state supreme

85. See generally Ion Bogdan Vasi et al., “No Fracking Way!” *Documentary Film, Discursive Opportunity, and Local Opposition Against Hydraulic Fracturing in the United States, 2010 to 2013*, 80 AM. SOC. REV. 934 (2015) (arguing that the film *Gasland* helped to create the antifracking movement worldwide).

86. See *Robinson Township v. Pennsylvania*, 83 A.3d 901, 915 (Pa. 2013).

87. *Id.*

88. *Id.*

89. 83 A.3d 901 (Pa. 2013).

90. *Id.* at 915.

91. *Id.* at 916.

92. *Id.* at 931.

93. *Id.*

94. *Id.*

95. *Id.* at 932.

96. *Id.*

court struck down those provisions of Act 13 that would have prevented local bans on fracking.⁹⁷

However, this result has not deterred other states from passing laws similar to Act 13.⁹⁸ This is probably because, as illustrated in Texas, other states do not have similar environmental guarantees in their constitutions that would defeat such laws. This may not stop due process challenges where the state uses a law like H.B. 40 to subvert local zoning and planning authority whenever that authority conflicts with proposed drilling sites. Indeed, the Texas state legislature seems to have drafted H.B. 40 with very little concern for the possibility of it being struck down on any environmental grounds, whether those grounds are constitutional, as in *Robinson Township*, or rooted in some other legal principle, such as the public trust doctrine.⁹⁹

D. The Regulatory Landscape of Fracking: Texas

Like Pennsylvania, Texas has a long history with the energy industry, but most of it has been with oil and gas. The first Texas oil rush occurred in Spindletop, just outside of Beaumont, in 1902. At that time, Texas observed the “pure” common law rule of capture when it came to oil and gas, meaning that the owner of the oil was the person who pulled it out of the ground, regardless of where the oil originated.¹⁰⁰ This incentivized drilling as many wells as possible on land that drillers owned or to which they leased the mineral rights in an attempt to suck up as much oil from underground as they could.¹⁰¹ The result was a dramatic depletion of the Spindletop reservoir within a few years and massive amounts of waste resulting from spills and well blowouts.¹⁰²

A few years later, in 1919, the state forbade waste of oil and natural gas and delegated the authority of creating and enforcing comprehensive oil and gas regulations to an agency it had created a few decades prior, the Texas

97. *See id.*

98. *See, e.g.*, S.B. 119, Gen. Assemb., Reg. Sess. (N.C. 2015); S.B. 809, 55th Leg., 1st Sess. (Okla. 2015); H.B. 40, 84th Leg., Reg. Sess. (Tex. 2015).

99. The public trust doctrine is a common law doctrine under which the state is treated as holding lands under navigable waters in trust for its citizens, such that it cannot undertake any projects that would destroy access to those submerged lands. In the past few decades, the doctrine has been expanded in some states to encompass not just land under navigable waters but clean air, water, and land in general. *See* Alexandra B. Klass, *Fracking and the Public Trust Doctrine: A Response to Spence*, 93 TEX. L. REV. SEE ALSO 47, 49–51 (2015).

100. *See* Bruce M. Kramer & Owen L. Anderson, *The Rule of Capture—An Oil and Gas Perspective*, 35 ENVTL. L. 899, 900–12 (2005). This is the law referred to in the famous “I drink your milkshake” scene in the film *There Will Be Blood*.

101. The Spindletop Oil Boom has been described as a “feeding frenzy of human sharks.” *See* Mary G. Ramos, *Oil and Texas: A Cultural History*, TEX. ALMANAC, <http://texasalmanac.com/topics/business/oil-and-texas-cultural-history> (last visited Feb. 16, 2017) [<https://perma.cc/5MBQ-6YYC>].

102. *See* DAVID F. PRINDLE, PETROLEUM POLITICS AND THE TEXAS RAILROAD COMMISSION 24 (2011). One massive blowout, the Lucas gusher, released up to 10,000 gallons of crude oil a day for nine days until it was capped. *See* Ramos, *supra* note 101.

Railroad Commission (“the Commission”).¹⁰³ The Commission created rules governing the manner of drilling, well spacing, waste disposal and handling, and separation of oil and associated natural gas, as well as requirements for record keeping by drilling companies.¹⁰⁴ In 1934, the Commission’s jurisdiction was extended to petroleum and petroleum byproducts.¹⁰⁵

The power held by the Commission over Texas oil and gas operations cannot be overstated. In fact, the Commission’s comprehensive control over oil and gas in Texas and its price-setting cooperation with other state oil and gas agencies under the Interstate Oil and Compact Commission led the magazine *Scientific American* to refer to the agency as the “world’s first oil cartel.”¹⁰⁶ Anyone who believes that an energy company has violated the Commission’s rules, whether they are a private property owner or municipality, must present their case before the Commission. If the Commission believes a violation has taken place, it will assess the appropriate fine and direct the offending drilling company to correct the violation.¹⁰⁷ If, however, it determines there is no violation, no report of agency action is made.¹⁰⁸ In this way, the Commission makes it difficult to tell how many complaints are made against oil and gas companies in Texas because records exist only where a violation was found.¹⁰⁹

Thus, Texas comprehensively regulates oil and gas at the state level, but that does not mean that cities have no role. Municipalities in Texas have historically enjoyed the right to regulate oil and gas activity as long as they do so in a way that is consistent with regulations promulgated by the Commission.¹¹⁰ The principle is that “municipalities in Texas have, under the police power, authority to regulate the drilling for and production of oil and gas within their corporate limits, when acting for the protection of their citizens and the property within their limits, looking to the preservation of good government, peace, and order therein.”¹¹¹

103. See James R. Norvell, *The Railroad Commission of Texas; Its Origin and Relation to the Oil and Gas Industry*, 40 TEX. L. REV. 230, 239 (1961).

104. For more information about the authority to make rules, see *id.* at 240.

105. See *History of the Railroad Commission 1866–1939*, RAILROAD COMMISSION TEX., <http://www.rrc.state.tx.us/about-us/history/history-1866-1939> (last visited Feb. 16, 2017) [<https://perma.cc/7LWM-H9EC>].

106. Melissa C. Lott, *The World’s First Oil Cartel Deep in the Heart of Texas*, SCI. AM. (Jan. 10, 2012), <http://blogs.scientificamerican.com/plugged-in/worlds-first-oil-cartel-deep-in-the-heart-of-texas> [<https://perma.cc/7NMB-ESM4>].

107. See 16 TEX. ADMIN. CODE § 1.01–3.107 (2015); see also Hannah J. Wiseman, *Risk and Response in Fracturing Policy*, 84 U. COLO. L. REV. 729, 747 (2013).

108. See Wiseman, *supra* note 107, at 749.

109. See *supra* note 107. In a testament to the Commission’s power, it also has long held the power to fine or imprison witnesses it finds in contempt of its orders. See Whitney R. Harris, *The Administrative Law of Texas*, 29 TEX. L. REV. 213, 221–22 (1950).

110. See *Unger v. State*, 629 S.W.2d 811, 812 (Tex. App. 1982). In this case, the Texas Court of Appeals in Fort Worth upheld the power of a city to both regulate and prohibit the drilling of oil within its borders without proper city permits. See *id.* This case is also cited by the First District Court of Appeals of Texas in *City of Houston v. BCCA Appeal Group*, 485 S.W.3d 444 (Tex. App. 2013).

111. See *Unger*, 629 S.W.2d at 812.

One frequently cited example of successful local regulation of oil and gas is Fort Worth, located on the oil-and-gas-rich Barnett Shale play. Fort Worth, which has a population of nearly one million,¹¹² formed a city commission in 2006 to make recommendations for the regulation of fracking.¹¹³ The result was a city ordinance that regulates, among other things, “noise levels, drilling of fresh water wells, compressor stations, landscaping and screening, drilling within a floodplain, saltwater disposal, measures for controlling water quality, road repairs, and . . . the allowable distance from existing structures that wells may be drilled.”¹¹⁴ The city also regulates the permitting of gas wells and requires the use of a closed loop mud system that keeps waste inside the wellbore during the drilling process.¹¹⁵ Further, while drilling may take place any time at urban well sites, the actual fracking process may only be performed during daylight hours and not at all on Sundays.¹¹⁶ Finally, the ordinance also includes mechanisms to enforce these requirements.¹¹⁷

Fort Worth regulated fracking in this way without state interference for eight years, but then, in late 2014, something changed. Less than an hour from Fort Worth is Denton, Texas, an affluent suburb of Dallas. Like Fort Worth, Denton is located in the Barnett Shale play.¹¹⁸ In 2014, Denton made international headlines as the first Texas city to campaign seriously for a ban on fracking within city limits.¹¹⁹ Denton was actually the first city in Texas to pass fracking regulations of any kind,¹²⁰ but over time the city became frustrated by the number of oil and gas wells that were “grandfathered” under the old state law regime and thus were exempt from the city’s new regulations.¹²¹ In many cases, although these grandfathered wells were originally drilled in more remote areas, development and growth resulted in the wells being closer to buildings and residences than city ordinances allowed.¹²² Consequently, these wells could be fracked even if they violated Denton’s setback, zoning, or other local ordinances.¹²³

Reportedly frustrated by the problem of grandfathered wells and the fear that they would lead to fracking in the city’s heart, a group of Denton

112. *Fort Worth, Texas*, WIKIPEDIA, https://en.wikipedia.org/w/index.php?title=Fort_Worth,_Texas&oldid=763502751 (last visited Feb. 16, 2017) [<https://perma.cc/B2NC-XGGZ>]. The Dallas-Fort Worth metro area is home to almost seven million people. *Id.*

113. Brian J. Smith, *Fracing the Environment?: An Examination of the Effects and Regulation of Hydraulic Fracturing*, 18 TEX. WESLEYAN L. REV. 129, 142 (2011).

114. *Id.*

115. *Id.* at 143.

116. *Id.*

117. *Id.* at 142.

118. See *Barnett Shale Information*, RAILROAD COMMISSION TEX., <http://www.rrc.state.tx.us/oil-gas/major-oil-gas-formations/barnett-shale-information/> (last visited Feb. 16, 2017) [<https://perma.cc/B5EX-4EJC>].

119. See Jake Rutherford, *Don’t “Frac” This Up: Denton’s Frac Ban and the Appropriate State Legislative Response*, 47 TEX. TECH L. REV. 843, 856 (2015).

120. See *id.*

121. See *id.*

122. See *Denton Fracking Facts*, FRACK FREE DENTON, <http://frackfreedenton.com/fracking-facts/> (last visited Feb. 16, 2017) [<https://perma.cc/CC74-URKN>].

123. See *id.*; see also Rutherford, *supra* note 119, at 856.

citizens, students, and environmental activists formed Frack Free Denton, a group whose goal was enacting a total ban on fracking in the city.¹²⁴ On August 4, 2014, the city passed a ban on fracking by a wide margin.¹²⁵ Although Denton was not the first Texas municipality to consider a fracking ban, the reaction of the powerful Texas Oil and Gas Association (TXOGA) to the formation of Frack Free Denton and the publicity the group received was swift: while the members of Frack Free Denton celebrated, TXOGA filed its lawsuit in the local district court.¹²⁶ A few months later, the state legislature passed H.B. 40, a bill that expressly preempts local laws regulating oil and gas activities.¹²⁷

After signing H.B. 40 at a state house ceremony in Austin, Texas, Governor Greg Abbott praised the new law, describing the bill as “so incredibly important.”¹²⁸ The purpose of the bill, according to Governor Abbott, is to do the “profound job of protecting private property rights.”¹²⁹ TXOGA said the same thing: Denton’s fracking ban unfairly prevented private property owners from leasing their mineral rights to oil and gas companies that wanted to drill or frack on their land.¹³⁰ But H.B. 40 goes further. The bill, which is more expansive than the bills that followed it in Oklahoma and North Carolina, provides that no municipality may “enact or enforce an ordinance or other measure, or an amendment or revision [thereof] that bans, limits, or otherwise regulates an oil and gas operation within the boundaries or extraterritorial jurisdiction of the municipality or political subdivision.”¹³¹

H.B. 40 does make an exception: municipalities may pass ordinances touching on some aboveground activity, including “regulation[s] governing fire and emergency response, traffic, lights, or noise, or imposing notice or reasonable setback requirements” provided that such regulations are “commercially reasonable.”¹³² “Commercially reasonable” means that any such aboveground regulations cannot interfere with the ability of a “reasonably prudent operator to fully, effectively, and economically exploit, develop, produce, process, and transport oil and gas, as determined based on the objective standard of a reasonably prudent operator and not on an individualized assessment of an actual operator’s capacity to act.”¹³³

124. See Rutherford, *supra* note 119, at 856.

125. See Maqbool, *supra* note 28.

126. See *id.*

127. See Max B. Baker, *Denton Fracking Bill Sails Through Texas Senate*, FORT WORTH STAR-TELEGRAM (May 4, 2015), <http://www.star-telegram.com/news/business/barnett-shale/article20199849.html> [<https://perma.cc/XC5N-ZWKB>].

128. Jim Malewitz, *Curbing Local Control, Abbott Signs “Denton Fracking Bill,”* TEX. TRIB. (May 18, 2015), <http://www.texastribune.org/2015/05/18/abbott-signs-denton-fracking-bill/> [<https://perma.cc/LUS6-3Y3X>].

129. *Id.*

130. See Wade Goodwyn, *New Texas Law Makes Fracking Bans Illegal*, NPR (May 20, 2015), <http://www.npr.org/2015/05/20/408156948/new-texas-law-makes-local-fracking-bans-illegal> [<https://perma.cc/LUS6-3Y3X>].

131. H.B. 40, 84th Leg., Reg. Sess. (Tex. 2015).

132. *Id.*

133. *Id.*

H.B. 40 thus appears to condition even traditional municipal powers on whether it makes fracking more expensive or difficult. H.B. 40 is an unprecedented challenge to the status of Texas's home rule cities because it does not just tell the cities that they may not directly regulate oil and gas (which they traditionally could do, provided those regulations were consistent with state laws), but it also tells the cities that they may not enact *any* law, even traffic ordinances or noise and light restrictions, that hampers oil and gas operations.

Within weeks of the passage of H.B. 40, the Oklahoma legislature passed S.B. 108.¹³⁴ North Carolina followed a few months later.¹³⁵ These state laws are not the only way that local governments have been prevented from regulating oil and gas directly—local bans and moratoria have also been struck down by state courts as impliedly or conflict preempted by state regulations.¹³⁶ There are also some cities and towns that do not wish to block fracking altogether but would like to exercise some control over whether and how fracking takes place. Yet even these kinds of regulations can be met with stiff resistance at the state level.¹³⁷

II. STATE VERSUS LOCAL CONTROL OF FRACKING

Traditionally, states oversee large-scale regulation of the oil and gas industry, with “large-scale” referring to well and intrastate pipeline siting. Small-scale regulation, such as zoning that affects the placement of well pads, the control of light and noise from drilling operations, and access and storage of water, has historically been handled by local governments. This reflects a longstanding approach of relegating matters of unique local character, like the distance between a well pad and a school, to local governments.

Each state has different state-local dynamics. Notably, there is less deviation in the abilities of cities and towns to regulate the small-scale aspects of fracking as there is in their abilities to enact blanket bans on fracking. The extent to which cities may enact outright bans on fracking depends, to some extent, on the degree of autonomy they have from the state government. This is because, although nearly all cities in the United States are home rule cities, what “home rule” means depends on how the powers of cities and localities are created. Still, while understanding the principle of home rule cities explains why states are now passing laws that expressly prohibit local regulation of oil and gas, the solution proposed in this Article applies to both home rule cities and other municipal bodies.

134. See S.B. 809, 55th Leg., 1st Sess. (Okla. 2015); H.B. 40, 84th Leg., Reg. Sess.

135. See S.B. 119, Gen. Assemb., Reg. Sess. (N.C. 2015).

136. See *supra* note 20 and accompanying text.

137. See H.B. 1119, 70th Gen. Assemb., 1st Reg. Sess. (Colo. 2015); H.B. 1205, 2015 Leg., Reg. Sess. (Fla. 2015); S.B. 421, 52d Legis., 1st Sess. (N.M. 2015); H.B. 1299, 118th Gen. Assemb., 2d Reg. Sess. (Ind. 2014); S.B. 245, 2013 Leg., Reg. Sess. (Kan. 2013).

A. *How States Control the Regulation of Fracking*

There is rich scholarship surrounding the idea that at least some large-scale control over fracking—typically, over where fracking may occur—is best left to state governments.¹³⁸ Those who argue for federal regulation may be concerned that state and local governments are too likely to be swayed by the oil and gas industry instead of recognizing that fracking is particularly disruptive, not only to the surrounding ecosystem but to any nearby human populations.

Despite the potential merits of a federal regulatory approach to oil and gas activities, there are two major reasons why, for the foreseeable future, this is probably not in the cards. First, Congress is much more divided on the issue of oil and gas, and fracking in particular, than it was on coal mining (which is subject to some federal oversight), especially now that federal environmental regulations and state renewable portfolio standards have pushed many electric utilities to switch to more natural gas-fired power plants over coal.¹³⁹ This has created a strong demand for natural gas, which fracking produces in great quantities.

Second, the EPA has been moving toward cooperative federalism in its regulatory models that put more and more direct authority in state hands because, as a practical matter, the agency does not have the resources to oversee all of the activities that fall within its regulatory purview.¹⁴⁰ The fracking boom in particular poses a very real budgetary challenge for the EPA: the U.S. had over 1.7 million fracked wells in 2015.¹⁴¹ The EPA simply cannot comprehensively monitor each and every well for regulatory compliance.¹⁴² The same argument can be made against state regulation of fracking, and in favor of local regulation of fracking, because state environmental agencies are also often fighting strained budgets and a lack of oversight.

In assessing what local governments can do to have a meaningful voice in the environmental impacts of fracking, it is useful to think of two particular areas where local police power might come into play: environmental and zoning concerns. Local governments regulate both environmental issues and zoning through their police power—i.e., their power to regulate to protect the health, safety, and welfare of their citizens. This Article is primarily concerned with how local governments may still

138. See, e.g., Fershee, *supra* note 14, at 61–74; Osofsky & Wiseman, *supra* note 11, at 778–79; Spence, *supra* note 1, at 376–84.

139. See Ben Wolfgang, *Fracking Support Becomes Bipartisan and Both Parties See Economic Benefits*, WASH. TIMES (Apr. 7, 2017), <http://www.washingtontimes.com/news/2013/apr/7/fracking-support-becomes-bipartisan-as-both-partie/?page=all> [<https://perma.cc/MP4A-CTFM>].

140. See, e.g., John P. Dwyer, *The Practice of Federalism Under the Clean Air Act*, 54 MD. L. REV. 1183, 1190–209 (1995).

141. See Matt Kilso, *1.7 Million Wells in the U.S.—A 2015 Update*, FRACTRACKER ALLIANCE, <http://www.fractracker.org/2015/08/1-7-million-wells/> (last visited Feb. 16, 2017) [<https://perma.cc/5AQE-AW95>].

142. See Dwyer, *supra* note 140, at 1190–92.

exercise regulatory authority in ways that address citizens' environmental concerns regarding fracking operations.¹⁴³

B. The Contours of State and Local Government Power

The contours of intrastate preemption—that is, when state law trumps local law—are notoriously ill defined. While the U.S. Constitution makes clear that federal law preempts state law, it is not as clear why and under what circumstances state law should preempt local law.¹⁴⁴ Part of the problem is that the relationship between states and municipalities is not as clearly hierarchical as the federal-state relationship. Is the state primary to the city, or do the two have more or less concurrent powers, parallel but rarely overlapping?¹⁴⁵

Beginning in the late eighteenth century, it became popular to characterize municipal governments as subordinate to their home states in all matters. This idea—called “Dillon’s Rule”—is closely associated with Judge John Forrest Dillon, a state and then federal judge who wrote an influential treatise on municipal corporations after the Civil War.¹⁴⁶ In an 1868 opinion, Judge Dillon famously stated, “Municipal corporations owe their origin to, and derive their powers and rights wholly from, the legislature. It breathes into them the breath of life, without which they cannot exist. As it creates, so may it destroy. If it may destroy, it may abridge and control.”¹⁴⁷

Under Dillon’s Rule, the state’s power over local governments is near absolute.¹⁴⁸ This view holds that local governments may exercise only powers expressly or impliedly granted by state legislatures and those powers necessary to carry on local business.¹⁴⁹ Because Dillon’s Rule does not permit local governments to exercise any authority within the state’s

143. In a subsequent article, this author will address the possibility that local governments maybe be able to address zoning concerns, including noise, light, setbacks, and other traditional municipal regulations through private contract.

144. See Uma Outka, *Intrastate Preemption in the Shifting Energy Sector*, 86 U. COLO. L. REV. 927, 943 (2015) (providing an in-depth analysis of state and local power sharing with respect to renewable energy development).

145. See John R. Nolan & Steven E. Gavin, *Hydrofracking: State Preemption, Local Power, and Cooperative Governance*, 63 CASE W. RES. L. REV. 995, 998–1000 (2013) (discussing how state and local governments might interact to govern fracking given the uncertain dynamic between them); see also Hannah J. Wiseman, *Disaggregating Preemption in Energy Law*, 40 HARV. ENVTL. L. REV. 293, 317–22 (2016) (proposing a new procedural approach to preemption questions that would first require identification of the area of regulation and which level of government typically regulates in that area).

146. See Paul Diller, *Intrastate Preemption*, 87 B.U. L. REV. 1113, 1122–23 (2007).

147. *City of Clinton v. Cedar Rapids & Mo. River R.R.*, 24 Iowa 455, 475 (1868). After this case was decided, the Iowa legislature adhered to Dillon’s Rule and kept “a tight legislative grip over municipal affairs through a combination of inaction and a jungle of code provisions” until a home rule provision was added to the state constitution in 1968. See Berent v. City of Iowa City, 738 N.W.2d 193, 196 (2007).

148. Diller, *supra* note 146, at 1123.

149. See *id.*

police power, there is little chance of a preemption problem: cities and towns simply cannot engage in substantive policymaking.¹⁵⁰

Today, only a few states use Dillon's Rule as the backbone of the state-local relationship—although many more states use some version of the rule for municipalities that do not meet the state requirements for home rule.¹⁵¹ Cities in these states still have only those legal powers affirmatively granted to them by the states, which might explain why S.B. 180 seems more permissive toward local lawmaking, specifically allowing municipalities to regulate for the health and safety of residents—it has to be to allow any lawmaking that might affect oil and gas operations to take place. Compare this to H.B. 40, which specifically prohibits cities and towns from passing *any* law that has an adverse commercial impact on oil and gas operations, with a specific list of exceptions.¹⁵² As discussed below, Texas is a home rule state, with cities that have much greater leeway in exercising their legal authority.

However, even Dillon's Rule acknowledged that municipalities do have some inherent powers that inure to it by virtue of its recognition by the state.¹⁵³ According to Professor David Barron, these inherent powers were “quasi-private corporate powers,” and Dillon himself explained that “[i]n many of its more important aspects a modern American city is not so much a miniature State as it is a business corporation,—its business being wisely to administer the local affairs and economically to expend the revenues of the incorporated community.”¹⁵⁴ “Local affairs” has a long history of including the municipal police power, which is the “earliest and strongest of municipal powers.”¹⁵⁵ This police power included “the protection of public health and safety, the regulation of public order, and the requirement that people comport themselves so as not to harm others or their property.”¹⁵⁶

Although Dillon's Rule did recognize a certain degree of inherent local authority, the idea that cities and towns only had authority beyond their municipal police power if the state expressly granted that authority was

150. *See id.* at 1123–24.

151. *See id.* at 1126 n.64. As Professor Diller notes, it is difficult to know how many states actually use Dillon's Rule because almost no states subscribe to the rule as Dillon articulated it, nor do states use a uniform definition of “home rule.” *See id.* One of the states with a prohibition on local fracking bans, Oklahoma, permits cities with populations of over 2,000 to adopt home rule by charter. OKLA. CONST. art. 18, § 3(a). Article 11 of the Texas constitution allows cities with populations of over 5,000 to adopt home rule by charter. TEX. CONST. art. 11, § 5. North Carolina does not really use either Dillon's Rule or home rule; the state legislature issues specific grants of power to municipalities à la Dillon's Rule, but in some cases those grants are more substantial than Dillon would have been comfortable with. *See* David W. Owens, *Local Government Authority to Implement Smart Growth Programs: Dillon's Rule, Legislative Reform and the Current State of Affairs in North Carolina*, 35 WAKE FOREST L. REV. 671, 675–76 (2010).

152. *See* H.B. 40, 84th Leg., Reg. Sess. (Tex. 2015).

153. *See* David J. Barron, *Reclaiming Home Rule*, 116 HARV. L. REV. 2257, 2285 (2003).

154. *Id.* (alteration in original) (quoting JOHN F. DILLON, COMMENTARIES ON THE LAW OF MUNICIPAL CORPORATIONS § 15, at 34 (4th ed. 1890)).

155. Hugh Spitzer, “Home Rule” vs. “Dillon's Rule” for Washington Cities, 38 SEATTLE U. L. REV. 809, 825 (2015).

156. *Id.*

challenged by contrary views, including the “Cooley Doctrine,” which espoused the theory of an inherent right to local self-determination.¹⁵⁷ This doctrine is named for Michigan Supreme Court Judge Thomas M. Cooley, who stated in an 1871 opinion that “local government is a matter of absolute right; and the state cannot take it away.”¹⁵⁸ The Cooley Doctrine, among other historical influences,¹⁵⁹ may have been a factor in the late nineteenth-century development of the home rule city, which, for the purposes of this Article, follows the definition laid out by Professor Paul Diller: “[A] system of state and local relations that gives some degree of permanent substantive lawmaking authority to localities beyond that which was provided by the traditional Dillon’s Rule regime.”¹⁶⁰

The move toward home rule cities has been described as an attempt to increase the participation of citizens in the democratic process, although this account has been challenged.¹⁶¹ According to Professor Barron, home rule is often enshrined as a powerful argument in favor of local autonomy, but the reality may be messier.¹⁶² Instead, home rule is one way that legislatures can defer making politically difficult decisions in increasingly complex metropolitan areas under the guise of promoting autonomy.¹⁶³

As Professor Uma Outka has noted, another historical holdover in state-municipal power structures is the fact that they develop in a reactionary manner, meaning that local governments first begin governing and then states stepped in afterward to define the limits of each locality’s authority.¹⁶⁴ How the state chooses to define those limits—whether by state constitution, by statute, or in practice—is important as well because defining local powers in the state constitution makes it considerably more difficult for the state legislature to alter or abridge those powers.¹⁶⁵ Most U.S. cities today are home rule cities, with certain powers over inherently local matters, but those powers are not unlimited.¹⁶⁶

C. Home Rule Cities and Intrastate Preemption

Although the precise contours of their powers vary from state to state, home rule cities generally have all powers except those the state has expressly reserved for itself.¹⁶⁷ Most states recognize that cities over a

157. *See id.*

158. *Id.* at 816.

159. *See* Barron, *supra* note 153, at 2277–82. Professor Barron specifically cites the legacy of the Greek and Roman city-states (or at least the idea of those city-states) and experiences in Britain before the Industrial Revolution. *See id.*

160. Diller, *supra* note 146, at 1124.

161. *See id.*

162. *See* Barron, *supra* note 153. Although Professor Barron’s article is primarily concerned with home rule as frustrating antisprawl policies, his more cynical description of home rule and its purposes provides an interesting counterpoint to the more traditional understanding of home rule as promoting democracy at the local level.

163. *See id.* at 2269–70.

164. *See* Outka, *supra* note 144, at 943.

165. *See id.* at 943–44.

166. *See* Diller, *supra* note 146, at 1126–27.

167. *See id.* at 1124.

certain population threshold are home rule cities, meaning (at least theoretically) that they have “exclusive control over affairs peculiar to the locale governed.”¹⁶⁸ The development of home rule cities began in the nineteenth century, as many states started delegating more day-to-day control to cities, either by constitution or statute.¹⁶⁹ There are conflicting accounts of what propelled the movement toward home rule and what policy goals that movement was intended to achieve, which helps explain why the term means different things from state to state.¹⁷⁰

The generally accepted view of home rule cities is that they may exercise any power not expressly withheld from them by the state.¹⁷¹ This means that even a home rule city’s minor ordinance can be expressly preempted by state legislation if that legislation specifically overrides local regulations on a certain subject matter. For example, states have passed legislation preventing local governments from banning smoking, banning plastic bags, raising the minimum wage, implementing rent control, and, most recently, protecting LGBT groups through antidiscrimination measures.¹⁷²

In many ways, the battle over fracking bans unfolding throughout the country is just another verse of a familiar song: that of an industry protesting to the state when cities and towns pass regulations that negatively impact that industry.¹⁷³ Although cities and towns can act as important policy innovators that are often on the vanguard of legal reform, some local ordinances may be met with strong resistance from impacted groups.¹⁷⁴ When controversial local laws are passed, businesses or interest groups that are impacted by those laws generally file preemption claims, arguing that the city cannot pass a law that is inconsistent or otherwise in conflict with state laws.¹⁷⁵

With respect to fracking, concerns over the economic effects of local fracking bans, moratoria, and regulation have prompted state action to curtail municipal regulations that might frustrate oil and gas operations. In Texas, for example, the state constitution enshrines home rule cities as possessing local powers to the fullest extent possible. As the Supreme Court of Texas has stated:

168. Jill Welch, *Home Rule Doctrine and State Preemption—The Iowa Supreme Court Resurrects Dillon’s Rule and Blurs the Line Between Implied Preemption and Inconsistency*, 30 RUTGERS L.J. 1548, 1550 (1999).

169. See Diller, *supra* note 146, at 1124.

170. See Outka, *supra* note 144, at 944.

171. See Richard Briffault, *Our Localism: Part I—The Structure of Local Government Law*, 90 COLUM. L. REV. 1, 85 (1990).

172. See Diller, *supra* note 146, at 1123–24, 1138 (noting that industry groups may find a more “sympathetic reception” in state legislatures than in some cities, as the former tend to be more politically conservative than the latter); see also Dave Phillips, *North Carolina Bans Local Anti-discrimination Policies*, N.Y. TIMES (Mar. 23, 2016), https://www.nytimes.com/2016/03/24/us/north-carolina-to-limit-bathroom-use-by-birth-gender.html?_r=0 [https://perma.cc/PH5W-BB5J].

173. See Diller, *supra* note 146, at 1138.

174. See *id.* at 1117–19.

175. See *id.* at 1119–20.

It was the purpose of the Home-Rule Amendment . . . to bestow upon accepting cities and towns of more than 5,000 population full power of self-government, that is, full authority to do anything the legislature could theretofore have authorized them to do. The result is that now it is necessary to look to the acts of the legislature not for grants of power to such cities but only for limitations on their powers.¹⁷⁶

Thus, “if the Legislature decides to preempt a subject matter normally within a home-rule city’s broad powers, it must do so with ‘unmistakable clarity.’”¹⁷⁷

This is precisely what the state of Texas did when it passed H.B. 40, forbidding cities and towns from enacting bans, moratoria, or most regulations over oil and gas activities.¹⁷⁸ But even where the state legislature has not expressly forbidden a home rule city from regulating oil and gas, state courts may still find that there is an unacceptable conflict between state and local laws. The home rule city of Fort Collins, Colorado, discovered this when its five-year moratorium on fracking—instituted so that the environmental effects of the technique could be better understood—was struck down by the state supreme court for being in “operational conflict” with state oil and gas regulations.¹⁷⁹

The lesson here is that, despite their theoretically greater autonomy, home rule cities are just as likely as their non-home rule counterparts to have their ordinances struck down by state legislatures or courts. Although scholars such as Professor Diller have suggested that courts should afford a high deference to local ordinances unless they “clearly contravene the purposes of state law,” the reality is that many courts seem to do just the opposite by assuming that local ordinances must fall when allegedly preempted by state law.¹⁸⁰ While this Article suggests a solution that could work in home rule or non-home rule cities, the reality is that state legislatures and state courts have the power to preempt *any* local ordinance, no matter how legally sound the underpinning of that ordinance might be.¹⁸¹ What makes the solution in this Article more likely to survive is that all local governments already have certain types of environmental ordinances in place, and, as discussed in Part III, incorporation of a state-level law should not be preempted, since it is furthering and not frustrating the state regulatory scheme.

176. *Forwood v. City of Taylor*, 214 S.W.2d 282, 286 (Tex. 1948).

177. *In re Sanchez*, 81 S.W.3d 794, 796 (Tex. 2002) (quoting *Dallas Merch.’s & Concessionaire’s Ass’n v. City of Dallas*, 852 S.W.2d 489, 491 (Tex. 1993)).

178. See H.B. 40, 84th Leg., Reg. Sess. (Tex. 2015).

179. See *City of Fort Collins v. Colo. Oil & Gas Ass’n*, 369 P.3d 586, 594 (Colo. 2016).

180. Diller, *supra* note 146, at 1173.

181. The problem of intrastate preemption is the subject of several excellent articles, but as Professor Diller points out, no single sweeping approach to local ordinances would work for all states, given the variance both between home rule and non-home rule jurisdictions and between home rule jurisdictions that derive their power from state constitutions versus state statutes. See *id.* at 1173–74.

III. PRESERVING LOCAL POWER OVER THE ENVIRONMENTAL IMPACTS OF FRACKING THROUGH ENFORCEMENT OF STATE LAW

One of the concerns for citizens in oil and gas producing states is that, even though there may be laws on the books to protect air, water, land, and other aspects that directly affect local environmental concerns, those states do not adequately enforce the laws.¹⁸² This part will provide an overview of the problem of inadequate enforcement in several states, including Texas, and provide a possible solution: the local incorporation and enforcement of state environmental laws. This solution can be employed by cities in every state, not just those with active oil and gas operations. There are, however, practical concerns that must be acknowledged.

It is important to reiterate that this Article argues for municipal incorporation of general environmental laws touching upon air and water quality standards, not on the incorporation of state oil and gas regulations. The reason why this distinction is important is because states have traditionally regulated oil and gas operations¹⁸³ and state court decisions and statutes prohibiting local oil and gas regulation apply (or purport to apply) preemption to local laws that directly regulate those operations. There is also the problem of cost. While incorporating state laws may not cost a municipality much, enforcing them is another matter. Consequently, larger and more affluent cities are more likely to be able to employ inspectors, maintain documents, and pursue compliance efforts—although it is also likely that local governments already have some type of licensing and enforcement program in place to enforce existing local environmental ordinances. Thus, this Article's proposed solution may not be feasible for some localities and may only be necessary when fracking operations cannot be stopped by local veto or regulated directly by municipal law.

A. Enforcement Gaps: When State Environmental Laws Are Strong on Paper but Weak in Application

If a state chooses to remove the power of municipalities to ban or regulate oil and gas activities, the state makes itself the sole custodian of its citizens' health and safety vis-à-vis fracking and other extractive activities. This proposition might not be of concern to local citizens if states were stringent about enforcing environmental laws that protect air, water, and

182. See *infra* Part III.A; see also Dara O'Rourke & Gregg P. Macey, *Community Environmental Policing: Assessing New Strategies of Public Participation in Environmental Regulation*, 22 J. POL'Y ANALYSIS & MGMT. 383 (2003) (discussing how poor state enforcement of environmental laws led to citizen groups, called "bucket brigades," that initiate their own enforcement efforts).

183. Before H.B. 40, however, Texas courts recognized local police power, permitting local governments to regulate oil and gas operations to the extent that those regulations were consistent with their police power. See *Unger v. Texas*, 629 S.W.2d 811, 812–13 (Tex. App. 1982) ("[M]unicipalities in Texas have, under the police power, authority to regulate the drilling for and production of oil and gas within their corporate limits, when acting for the protection of their citizens and the property within their limits, looking to the preservation of good government, peace, and order therein." (quoting *Klepak v. Humble Oil & Ref. Co.*, 177 S.W.2d 215 (Tex. App. 1944))).

soil, both inside and outside of the context of fracking, but budgetary restraints have created enforcement gaps in many states.¹⁸⁴ Thus, in some areas, there is a double bind: fracking may not be banned, nor is there sufficient state enforcement of environmental protections. Similarly, at the federal level, the EPA budget has remained flat in recent years, and the agency has been accused of having insufficient resources to oversee state compliance with federal environmental laws.¹⁸⁵ Because citizens have more direct channels of communication to their municipal governments, localities can respond directly to environmental issues, including issues stemming from fracking operations or other extractive techniques, in a more directed manner. To avoid preemption by state environmental laws, however, localities may not wish to attempt enacting their own regulations. Instead, they can incorporate existing state environmental laws and enforce them locally.¹⁸⁶

B. Local Enforcement of State Environmental Regulations

The incorporation of state environmental laws at the local level is one way in which municipalities can exercise their police power to protect citizens where they cannot directly regulate oil and gas. In fact, incorporating state environmental laws protects local residents in many contexts, not just where fracking is concerned. In a sense, this proposition is simply strengthening the already multilevel nature of environmental laws: these state laws already apply to local actors, but for reasons described above, the state is not always in the best position to be aware of potential violations or to enforce its own regulations.

184. See, e.g., *Environmental Spending in the 50 States*, BALLOTPEDIA, https://ballotpedia.org/Environmental_spending_in_the_50_states (last visited Feb. 16, 2017) (showing environmental budget changes across the states from 2011 to 2015, although these numbers do not indicate on what programs the money is being spent) [<https://perma.cc/TV86-U8G6>]; Andrew Kenney and Craig Jarvis, *Cuts to DENR Regulators Jarring in Wake of Dan River Spill*, CHARLOTTE OBSERVER (Mar. 8, 2014, 3:16 PM), <http://www.charlotteobserver.com/news/local/article9102665.html> (detailing the continuing budget cuts and reorganization of the North Carolina Department of Environment and Natural Resources, now the Department of Environmental Quality) [<https://perma.cc/VRW4-EY8P>]; Joe Wertz, *State Impact: Why Continued State Funding Cuts Could Squeeze Programs Protecting Public Water*, NPR (Feb. 4, 2016, 2:39 PM), <https://stateimpact.npr.org/oklahoma/2016/02/04/why-continued-state-funding-cuts-could-squeeze-programs-protecting-public-water/> (noting that the Oklahoma Department of Environmental Quality's budget has declined nearly 30 percent from 2009 to 2016) [<https://perma.cc/X7WF-ZQCY>]. This same is true in Florida, where the legislature came very close to passing a ban on local fracking vetoes. See, e.g., Jeff Burlew, *More Than 1,100 State-Employee Positions Cut*, TALLAHASSEE DEMOCRAT (June 23, 2015), <http://www.tallahassee.com/story/news/2015/06/23/state-employee-positions-cut/29154335/> (detailing the impact of state budget cuts on Florida's Department of Environmental Protection) [<https://perma.cc/8YAJ-TNAU>].

185. See Joe Davidson, *EPA's Fall in Flint, an Aberration or Part of a Pattern?*, WASH. POST (Jan. 28, 2016), <https://www.washingtonpost.com/news/federal-eye/wp/2016/01/28/epas-fall-in-flint-an-aberration-or-part-of-a-pattern/> (containing data showing that agency inspection and enforcement has declined because there was little money leftover after bureaucratic spending) [<https://perma.cc/S9M6-SBFS>].

186. This is something states have done many times by enacting statutes that implement and enforce federal laws. See *infra* Part III.

Further, a state argument that its own air and water protections preempt local incorporation of those same protections would be discordant with the fact that environmental regulation is already an area of cooperative federalism. Congress has set minimum requirements for air and water protections and requirements in the Clean Air Act (CAA) and the Clean Water Act (CWA). Every state must have either created a State Implementation Policy (SIP) to comply with the CAA and CWA, or it must have enacted its own regulatory scheme that at least meets the federal minimums set forth in the CAA and CWA.¹⁸⁷ Thus, environmental regulation is already the subject of both federal- and state-level decision making.

This cooperative federalism model promotes a centralized national environmental policy and seeks to ensure that all citizens have at least a baseline level of protection from certain environmental harms.¹⁸⁸ This centralized approach is also desirable from an industry perspective because it promotes regulatory uniformity, which industries doing business on the national or state level prefer.¹⁸⁹ The costs associated with complying with differing state and national laws is something that larger industries actively seek to avoid. As Professor Diller has explained, industries generally resist local laws that are out of step with state and national laws—such as bans on plastic bags, trans fats, or sugary drinks—by arguing that an inconsistent patchwork of regulations is created by such local laws.¹⁹⁰

Thus, allowing localities to incorporate and enforce state environmental laws is consistent with the goals of centralized environmental regulations because it avoids the costly patchwork of state and local regulations.¹⁹¹ It is also possible that local residents can help with enforcement—the so-called “bucket brigades” and other local environmental task forces—and perhaps even strengthen otherwise weak state-level environmental law.¹⁹² However, even the incorporation of state laws—as opposed to unique local ordinances—may be subject to a preemption challenge from the state or an

187. See Paul S. Weiland, *Federal and State Preemption of Environmental Laws: A Critical Analysis*, 24 HARV. ENVTL. L. REV. 237, 256–57 (2000).

188. See *id.* at 255.

189. See Diller, *supra* note 146, at 1134 (noting that one of the reasons why industries may oppose local regulation, even when it might benefit them, is their interest in regulatory uniformity). This obviously was not true in *BCCA Appeal Group v. City of Houston*, 496 S.W.3d 1 (Tex. 2016), where it would seem that the industrial facility owners and operators actually protested the enforcement of the state’s clean air and water laws by anyone, whether it was the TCEQ or the City of Houston.

190. See Diller, *supra* note 146, at 1134; Nina A. Mendelson, *Chevron and Preemption*, 102 MICH. L. REV. 737, 765 (2004) (“[W]ell-organized interest groups, such as business trade associations . . . are likely to strongly prefer uniform national rules.”).

191. However, it is true that some states have relatively weak environmental laws to begin with, and thus enforcement by local governments may not accomplish much. In such cases, “bucket brigades” might be a better option. See *supra* note 182 and accompanying text.

192. See, e.g., O’Rourke & Macey, *supra* note 182, at 403–04. Some of these citizen cleanup operations have, in fact, been in response to incidents at oil refineries. See *id.* at 392 (describing bucket brigade efforts to clean up after explosions and other incidents at refineries in California and Louisiana).

affected party. So, it must be possible to argue that local incorporation of state law survives both implied and express preemption challenges and that there are additional considerations that would support this option for cities and towns. This Article makes the case that incorporating and enforcing state environmental laws at the local level should survive such challenges.¹⁹³ Doing so, however, requires attention to a few doctrines that have developed in the intrastate context.

1. Incorporating State Law to Ensure Consistent Enforcement of Environmental Protections

The first step for a local government that wishes to ensure compliance with state environmental laws or SIPs within its borders is to incorporate those laws into its local ordinances, which can be accomplished by reference.¹⁹⁴ Incorporation by reference avoids potential preemption challenges based on differing wording between the state and local approaches.¹⁹⁵ The next step would be to incorporate the rules of the state environmental enforcement agency.¹⁹⁶ These rules typically set out the specific air and water quality requirements and the enforcement mechanisms and thus are key to meaningful local participation in monitoring and enforcing environmental compliance.¹⁹⁷ Once the agency rules have been incorporated, there are several options for local governments, including contracting with the state environmental agency and creating a parallel enforcement scheme.¹⁹⁸

At this point, it should be noted that one city has incorporated state environmental laws into its own code, and its experience is instructive. Houston, Texas, has incorporated the Texas Clean Air Act (TCAA), chapter 7 of the state water code, and rules of the Texas Commission on Environmental Quality (TCEQ), “as they currently are and as they may be changed from time to time,” into the health section of its code of ordinances.¹⁹⁹ Houston, the largest city in Texas and the fourth largest city in the country, has long had serious air quality problems, partially due to its proximity to industrial facilities, power plants, and refineries.²⁰⁰ Despite

193. Although, as noted in Part II, there is no way to guarantee that any local ordinance will not be found preempted or overruled by state legislation.

194. See Weiland, *supra* note 187, 256–57.

195. See Diller, *supra* note 146, at 1142.

196. See, e.g., Wiseman, *supra* note 107, at 740–78 (referencing the power of state oil and gas regulators, including the Texas Railroad Commission, in setting and enforcing laws).

197. See, e.g., *City of Houston v. BCCA Appeal Grp., Inc.*, 485 S.W.3d 444, 448 (Tex. App. 2013) (describing how the Texas Commission on Environmental Quality was created to oversee and enforce state environmental laws), *aff'd in part, rev'd in part*, 496 S.W.3d 1 (Tex. 2016).

198. See *id.* at 449–50 (describing the options of Texas cities in enforcing state environmental laws).

199. See HOUS., TEX., CODE OF ORDINANCES, ch. 21, art. VI, § 21-164 to -166 (2016); see also TEX. HEALTH & SAFETY CODE ANN. § 382 (West 1989).

200. In 2015, the American Lung Association ranked Houston the sixth worst city in the country for air pollution—an improvement from its rankings in previous years. See *State of the Air 2015: Most Polluted Cities*, AM. LUNG ASS'N <http://www.stateoftheair.org/2015/>

the existence of the TCAA, Houston consistently ranks among the worst U.S. cities for air quality.²⁰¹ In 1992, Houston enacted an air quality ordinance that was intended to regulate emitters not covered by the TCAA.²⁰² Houston also contracted with the TCEQ to enforce emissions standards in the city but chose to discontinue this relationship in 2005.²⁰³ In 2006 and 2007, the city amended its ordinance to incorporate the provisions of the TCAA and water code “as if written word for word . . . including appendices and other matters promulgated as part of the state rules.”²⁰⁴ Further, the city incorporated those provisions “as they currently are and as may be changed from time to time.”²⁰⁵ The city’s health officers were directed to enforce the program and impose criminal sanctions for violations.²⁰⁶

So, contracting with the state environmental agency is an option with several advantages over creating a local enforcement program. Houston pursued this route for over a decade until it decided that this arrangement was not providing adequate enforcement.²⁰⁷ If a local government chooses this route, it may not require incorporating any state laws or rules into the local ordinances, although doing so does give the locality potentially more enforcement options. This is because the type of contracting relationship that Houston had with the TCEQ put inspection in the hands of the city and enforcement in the hands of the agency.²⁰⁸ When this is the case, inaction by the state agency could moot the locality’s efforts in inspecting emitters and water resources, and, without any local power grant, there is nothing the city or town could do about it.²⁰⁹

Still, a local government could choose to follow the contracting route, with or without actually incorporating state law and rules, and the primary advantage of doing so would be that preemption challenges to such an arrangement are unlikely. Where the locality and state are working

city-rankings/most-polluted-cities.html (last visited Feb. 16, 2017) [<https://perma.cc/5QC5-9T46>]; see also Matthew Tresaugue, *Houston’s Air Is Cleaner, but the Goalpost Is Moving*, HOUS. CHRON. (Oct. 12, 2014), <http://www.houstonchronicle.com/news/science-environment/article/Houston-s-air-is-cleaner-but-the-goal-post-is-5818359.php> [<https://perma.cc/BM54-HVC8>].

201. See *supra* note 200; see also Jamie Smith Hopkins, *In Texas, Environmental Officials Align with Polluters*, NAT’L GEOGRAPHIC (Mar. 17, 2015), <http://news.nationalgeographic.com/2015/03/20150317-ozone-air-pollution-clean-air-act-smog-texas-houston-dallas/> (noting that Texas has far and away the country’s highest levels of nitrogen oxides and volatile organic compounds, both of which not only are greenhouse gases but create smog and exacerbate asthma and other lung conditions in humans) [<https://perma.cc/DV8K-54GR>].

202. *BCCA Appeal Grp.*, 485 S.W.3d at 449.

203. *Id.* at 450.

204. *Id.* at 451 (quoting HOUS., TEX., CODE OF ORDINANCES ch. 21, art. VI, § 21-164(a)).

205. *Id.*

206. See *id.*

207. *Id.*

208. See *id.* (“Prior to 2007, the City contracted with TCEQ and cooperated with the agency to ensure that sources of emissions located within the City’s borders were in compliance with state law by inspecting and referring cases for enforcement action to the TCEQ.”).

209. See O’Rourke & Macey, *supra* note 182.

pursuant to an agreement to cooperate, and especially when there is no additional local licensing and enforcement scheme, there is no basis for arguing that the locality's actions are preempted. However, as Houston's experience illustrates, taking this route is only effective if the state agency is willing and able to pursue violators reported by the locality. If the agency is not inclined to do so, the local government may be interested in creating its own parallel enforcement scheme.²¹⁰

As Houston's experience shows, incorporating and enforcing state laws can provoke preemption challenges. Although there is no way to guarantee that any local ordinance will withstand an intrastate preemption challenge, this Article proposes ways in which local governments can anticipate preemption arguments and try to design incorporation and enforcement schemes to counter those arguments.

2. Incorporating State Law: Express Preemption

Generally, express intrastate preemption requires that the state has explicitly forbidden localities from legislating in a certain sphere. On the surface, this sounds similar to the principle of independence and self-rule for home rule cities: for an ordinance or other law passed by a home rule city to be expressly preempted by state law, that state law must clearly and unequivocally state that local governments may not regulate any of the subject matter that the state law at issue covers.²¹¹ Even though this may give the impression that express preemption is the only way to strike down a home rule ordinance, this is not always the case, although at least one state legislature (Illinois) and one state's supreme court (Alaska) have made clear that home rule city ordinances can be defeated *only* by express preemption.²¹² This is very much the minority approach.

With respect to environmental regulation, this author was not able to find any state laws that expressly prohibit local governments from regulating environmental issues broadly. There are, however, examples of directives in state environmental laws to the effect that local governments may not regulate in a way that is inconsistent with state laws.²¹³ This implicates implied, as opposed to express, preemption, which is indeed the backbone of intrastate preemption for both home rule and non-home rule ordinances.²¹⁴

210. *BCCA Appeal Grp.*, 485 S.W.3d at 451.

211. *See* Diller, *supra* note 146, at 1124–25. Even express preemption is not a sure way to strike down a local ordinance if the state constitution prevents it. *See* Outka, *supra* note 144, at 934 (providing *Robinson Township v. Pennsylvania*, 83 A.3d 901 (Pa. 2013), as an example of a case in which a state's express preemption of local laws failed).

212. *See* Diller, *supra* note 146, at 1156–59.

213. Indeed, this is true of the TCAA. *See* *BCCA Appeal Grp., Inc. v. City of Houston*, 496 S.W.3d 1, 1 (Tex. 2016).

214. *See* Diller, *supra* note 146, at 1140–42.

3. Incorporating State Law: The Arguments Against Implied Preemption

There are two kinds of implied preemption: conflict and field.²¹⁵ Intrastate preemption tends to be of the conflict variety, and conflict preemption is further subdivided into “physical impossibility” and “obstacle” preemption.²¹⁶ With respect to field preemption, state law could impliedly preempt a local ordinance when the state has so thoroughly regulated the subject matter—here, the environment—that there is nothing left for the local government to regulate.²¹⁷ While field preemption has been used to stop local regulation of oil and gas, it would be a more difficult argument in the environmental context given that local governments already regulate environmental matters through building, health, air, and water ordinances.

a. Conflict Preemption

Conflict preemption arises when it is either physically impossible to comply with both the state and local laws on the same subject matter or when the local law “stands as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress.”²¹⁸ Many courts that have found local ordinances to be preempted by state law have employed an analysis closest to the latter category, obstacle preemption.²¹⁹ Under this preemption analysis, the question should be whether the local ordinance “substantially interferes with state law or the state’s constitutional responsibilities.”²²⁰ This would be the appropriate inquiry, particularly in the case of a home rule city, because preemption should be applied to strike down local ordinances only in rare circumstances where a genuine conflict with state law exists.

However, as Professor Diller points out, there are also many examples of courts using a confusing and inconsistent version of the physical impossibility test that he terms “prohibit/permit.”²²¹ This prohibit/permit approach “asks whether a local ordinance . . . ‘prohibits an act permitted by statute.’”²²² In essence, this test rests on the proposition that the state law provides a regulatory baseline, and any activity above the baseline is permitted. If the local ordinance attempts to punish any above-the-baseline

215. *See id.*

216. *See id.* at 1141.

217. *See id.* at 1153.

218. *Hines v. Davidowitz*, 312 U.S. 52, 67 (1941); *see also* *Freightliner Corp. v. Myrick*, 514 U.S. 280, 287 (1995); *English v. Gen. Elec. Co.*, 496 U.S. 72, 78–79 (1990); *Hillsborough County v. Automated Med. Labs., Inc.*, 471 U.S. 707, 713 (1985).

219. *See* Diller, *supra* note 146, at 1141–42.

220. *See id.* at 1142.

221. *See id.*

222. *Id.* (quoting *Goodwill v. Humboldt County*, 575 N.W.2d 486, 493 (Iowa 1998)).

activity, the argument goes, it should be struck down as preempted.²²³ Although this approach is directly counter to the authority of home rule cities in particular and ignores the reality of uniquely local problems generally, opponents of local action nonetheless frequently employ it with success.²²⁴

Indeed, the Supreme Court of Texas used a version of the prohibit/permit test to strike down the enforcement provisions of Houston's incorporation of the TCAA. Although the court of appeals had held that Houston's ordinances were not preempted, because they did not conflict with state law, the state supreme court found otherwise in *BCCA Appeal Group v. City of Houston*.²²⁵ According to the court, the incorporation of the TCAA and the TCEQ rules were permissible.²²⁶ What was preempted was the city's additional licensing requirements and enforcement mechanism.²²⁷ The court reached this conclusion by looking to the TCAA and the state water code, both of which expressly permitted local regulations not inconsistent with the state law.²²⁸ In the court's view, Houston's ordinance was inconsistent with state laws because the city imposed additional licensing requirements for emitters and imposed possible criminal sanctions, even where the TCEQ had determined that there was no violation.²²⁹ This was Houston prohibiting what was permitted by state law and was thus preempted.²³⁰ The same reasoning was used to strike down the licensing requirement, even though failing to obtain a license was not so much permitted by state law as simply not addressed.²³¹

The *BCCA Appeal Group* decision is disturbing because it renders moot the fact that the state law itself permits local regulation of air and water. If a city cannot enforce requirements identical to those imposed by the state, then what local regulations of air and water would survive the Texas court's analysis? Further, putting aside the court's strained reading of Houston's ordinance (which actually appears to only permit criminal sanctions where the TCEQ has determined that there is a violation in direct conflict the court's interpretation of allowing the city to impose criminal sanctions in

223. *See id.* at 1142–43 (citing cases). This test has been used to strike down local smoking bans, rent control ordinances, full service gas stations, minimum wage increases, billboard restrictions, LGBT protections, and more. *Id.*

224. *See id.* at 1142.

225. 496 S.W.3d 1 (Tex. 2016); *see id.* at 5.

226. There was no preemption challenge to the incorporation of the TCAA, the state's water code, or the TCEQ rules in and of themselves but rather to the city's separate licensing requirement and enforcement powers. *See id.* at 14.

227. *See id.* at 11.

228. *Id.* at 17–19.

229. *See id.*

230. *See id.* at 19.

231. *See id.* at 19–20. The court's finding with respect to the registration requirement was based on its assertion that, under the Houston ordinance, criminal fines could be imposed for failing to obtain a license. *See id.* *But see infra* note 232 (noting that Justice Jeffrey Boyd observed in his dissent that it is not clear that Houston's ordinance imposed criminal fines if the TCEQ found no violation of the TCAA).

spite of the TCEQ's finding of no violation),²³² the court also seemed to overlook the fact that creating a local enforcement scheme like Houston's is a way to *effectuate* a state law, not to frustrate it.

If a local government wishes to incorporate and enforce state law in a way that is more likely to survive the kind of prohibit/permit analysis used in *BCCA Appeal Group*, the locality should make very clear that additional licensing requirements would come with the typical fines imposed for failing to follow local licensing schemes. Also, additional criminal or civil fines to be collected by the city should be explicitly dependent upon the finding of a violation by the state environmental agency.

Adding cumulative penalties for violation of state law, as Houston did through criminal sanctions on top of the TCEQ's finding of a violation and levying of a civil fine, only furthers the state's interest in compliance with its laws. Further, as the dissent in *BCCA Appeal Group* noted, if the court can limit the interpretation and application of the city ordinance in a way that is consistent with state law, it should do so in lieu of preempting the ordinance.²³³ As *BCCA Appeal Group* shows, there is no way to fully ensure that a local ordinance survives a preemption analysis because state courts do not give city ordinances presumptive validity or much deference, even when (as was true in *BCCA Appeal Group*) state precedent would seem to require it.²³⁴ However, given the importance of protecting the health of individuals, especially when fracking or other large-scale extractive activities are taking place near homes and schools, a local government could follow these recommendations in incorporating and enforcing state laws and have a strong argument that doing so should survive a conflict preemption analysis.

b. Field Preemption

The second type of implied preemption, field preemption, may be raised when the state has either expressed an intent to occupy a given field of regulation or when a regulatory scheme is so pervasive that there is nothing left for local governments to regulate.²³⁵ It is difficult to argue persuasively that a state has pervasively regulated the field when it is complying with minimums set by the federal government in the CAA and CWA. Further, as noted above, the CAA, the CWA, and many state SIPs acknowledge that local authorities play a role in environmental regulation and enforcement.²³⁶

232. This was a primary reason for Justice Boyd's dissent in *BCCA Appeal Group*. *See id.* at 24–33 (Boyd, J., dissenting). Justice Boyd pointed out that the majority's interpretation of Houston's ordinance as allowing the city to impose criminal sanctions even when the TCEQ had found no violation was not consistent with the plain language of the ordinance. *See id.* Further, Justice Boyd observed that the state law did not mandate that the TCEQ be the sole source of remedies for violations of the TCAA and the water code, nor did the majority seem to apply the presumption of validity afforded by past precedent to home rule cities. *See id.*

233. *See id.*

234. *See id.* at 26–28.

235. *See* Weiland, *supra* note 187, at 255.

236. *See id.* at 255–57.

However, there is an additional reason states would probably not prevail on a field preemption argument: states have not occupied the field of environmental regulations. Consistent with their traditional police power, local governments regularly pass ordinances on wastewater treatment and removal, the use of specified toxic materials in building codes, the handling of solid waste removal in the city or town limits, and more.²³⁷ Because both states and local governments regularly make laws in the environmental sphere, it would be difficult for a state to argue that it has preempted the field of environmental protection.

*C. Additional Policy Considerations Against Preempting
Local Environmental Laws*

In addition to the arguments that local adoption of state environmental laws should not be expressly or impliedly preempted, there are also several policy and prudential reasons against states attempting to use the power of preemption to block local adoption and enforcement of state laws. Although some states have expressly forbidden local bans on fracking and local regulation of the oil and gas industry, the solution this Article advocates for does not deal with the direct regulation of the extractive industry or its activities. Furthermore, as many critics of preemption have pointed out, overuse of the doctrine by state legislatures could begin to erode both the benefits of the federalism model and citizens' confidence in the democratic process, a likely result when voter attempts to address local problems are repeatedly trumped by the state.

1. Local Adoption of State Laws Is Not Preempted
by State Bans on Local Oil and Gas Regulations

States have traditionally regulated oil and gas, in part, because all state citizens have an interest in promoting a statewide industry that produces profits that can be shared by all. By contrast, environmental laws can address uniquely local concerns and have traditionally also been the subject of local ordinances. While there are thus important distinctions between the two types of regulation, one argument that should be addressed is whether or not incorporation of state laws is a type of de facto local regulation of oil and gas, something that is forbidden in several states.²³⁸

A local government's decision to incorporate and enforce state environmental laws is not a ban, limit, or other regulation on oil and gas operations. Rather, it is a limit on air pollution from *any* source. To the extent that an oil and gas operation might violate the requirements of the local air regulations, the result would not be a limitation on those operations but rather—at most—the requirement to obtain a license and paying fines in

237. See, e.g., OKLA. CITY, OKLA., CODE OF ORDINANCES chs. 4, 12, 16, 27, 47, 49 (2016) (regulating air pollution, building codes, drainage and flood control, litter, sewers and sewage control, and solid wastes).

238. See *City of Houston v. BCCA Appeal Grp., Inc.*, 485 S.W.3d 444, 458 (Tex. App. 2013), *aff'd in part, rev'd in part*, 496 S.W.3d 1 (Tex. 2016).

the event of air or water pollution in violation of state law. Moreover, the local incorporation of an existing state law does not impose substantial additional costs, in and of itself, on the energy industry. Indeed, oil and gas companies conducting extractive activities should have already factored in the cost of compliance with state environmental laws. Given the enormous costs associated with oil and gas activities, and fracking in particular, it is difficult to believe that the cost of the license and—in the case of a violation—a fine would make fracking commercially unreasonable.

However, even if a court were sympathetic to this argument, localities can include severability clauses in their incorporation of state laws, which would allow the court to strike down any additional licenses or fees imposed by the local ordinance while letting the rest of the ordinance stand. The city could then reconsider how to enforce its pollution limits in different ways that would not necessarily impose an additional financial burden on oil and gas operations.

2. Unlike Most Oil and Gas Regulation, Environmental Protection Is Within Local Police Power

A recurring theme in the literature on the power of local governments is the inconsistent treatment of those governments by state legislatures across the United States.²³⁹ Whether cities have been designated home rule by constitutional provision, statute, or simply through practice can change the understanding of what localities may do without state permission. Yet even before the competing visions of local authority under Dillon's Rule and home rule emerged in the United States, there was the older idea of the local police power. Local police power has long been understood to extend to the protection of the health and welfare of residents.²⁴⁰ As noted above, the traditional powers of local governments over environmental issues by way of air pollution control, wastewater disposal, and building materials stem from this traditional notion of what cities and towns may regulate.

Indeed, the U.S. Supreme Court has held that local regulations over air pollution fall squarely within the local police power. In *Huron Portland Cement Co. v. City of Detroit*,²⁴¹ the Court considered whether federal law preempted a local smoke abatement ordinance enacted by Detroit, Michigan.²⁴² The appellant, a vessel owner, brought suit after the city fined the appellant for violating the smoke ordinance when its vessels were docked at the city port for long periods of time.²⁴³ The state courts found for Detroit.²⁴⁴ The Court granted certiorari, and the appellant argued that the Detroit ordinance did not apply to its vessels because (1) the vessels had already passed a comprehensive licensing and inspection scheme

239. See generally Diller, *supra* note 146; Outka, *supra* note 144; Spence, *supra* note 1; Wiseman, *supra* note 145.

240. See, e.g., *Huron Portland Cement Co. v. City of Detroit*, 362 U.S. 440 (1960).

241. 362 U.S. 440 (1960).

242. See *id.* at 441–42.

243. See *id.* at 441.

244. *Id.*

enacted by Congress, and the Detroit ordinance was expressly or conflict preempted by those federal requirements and (2) even if there was no express preemption, the Detroit ordinance was impliedly preempted by the Commerce Clause.²⁴⁵

The Court began its analysis by noting that Detroit's "ordinance was enacted for the manifest purpose of promoting the health and welfare of the city's inhabitants. Legislation designed to free from pollution the very air that people breathe clearly falls within the exercise of even the most traditional concept of what is compendiously known as the police power."²⁴⁶ The Court then proceeded to reject both of the appellant's arguments.²⁴⁷ With respect to the scope of Detroit's lawmaking power, the Court noted that "[t]he basic limitations upon local legislative power in this area are clear enough. The controlling principles have been reiterated over the years in a host of this Court's decisions. Evenhanded local regulation to effectuate a legitimate local public interest is valid unless pre-empted by federal action."²⁴⁸

First, the Court held that the smoke ordinance was not expressly or impliedly preempted by the federal vessel inspection and licensing scheme because the purpose of the federal and state laws at issue were not mutually exclusive: the purpose of the federal scheme was "to insure the seagoing safety of vessels subject to inspection,"²⁴⁹ while the purpose of the Detroit smoke ordinance was "elimination of air pollution to protect the health and enhance the cleanliness of the local community."²⁵⁰ Next, the Court recognized that Congress itself had expressly recognized the importance of state and local governance in protecting public health in the text of the CAA: "it is hereby declared to be the policy of Congress to preserve and protect the primary responsibilities and rights of the States and local governments in controlling air pollution."²⁵¹

Thus, because the federal and state regimes did not overlap and provide conflicting or opposed directives, there was no express or conflict preemption based on the federal vessel inspection and licensing scheme.²⁵² Indeed, although the Court did not articulate this as such, its emphasis on the important role that state and local governments play in regulating pollution also suggests that there could be no field preemption in this realm, even if the appellants had made such an argument.²⁵³ With respect to the suggestion that the very existence of a federal licensing scheme precluded the exercise of *any* local law on vessels that had complied with the federal requirements, the Court was equally unconvinced, holding that the possession of a federal license "does not immunize a ship from the

245. *See id.*

246. *Id.* at 442.

247. *See id.* at 442–46.

248. *Id.* at 443 (citations omitted).

249. *Id.* at 445.

250. *Id.*

251. *Id.*

252. *See id.* at 446.

253. *See id.*

operation of the normal incidents of local police power.”²⁵⁴ Finally, the Court noted that the smoke ordinance did not offend the Commerce Clause, because it applied to “‘any person, firm or corporation’ within the city” and thus did not discriminate against interstate commerce.²⁵⁵

The Court’s opinion in *Huron Portland Cement* set out important principles with respect to local police power. In particular, the Court acknowledged the primary authority of state *and* local governments in protecting the health, safety, and welfare of its citizens. This does not mean that the federal government has no authority to regulate in the environmental realm, but it does suggest that the authority to do so is shared rather than exclusive: federal, state, and municipal authorities all have a role to play in ensuring that the air, water, and soil that people are surrounded by does not pose a danger to people’s health.

While it is true that *Huron Portland Cement* did not offer any specific guidance as to the balance of power when both a state and its municipalities seek to govern in the same space, the reality is that local governments already regulate extensively in the environmental context through the enactment of building codes—air, noise, and light pollution limits; storm and wastewater regulations; and more. Thus, should a city’s or town’s residents believe that steps must be taken to protect the environment because the state is not enforcing its own laws, the decision to incorporate those state laws and to enforce them locally should properly be seen as a legitimate exercise of concurrent state and local police power.

3. Preventing the Adoption of State Laws by Local Governments Through Preemption Erodes the Democratic Process

States that have already overruled the votes of local citizens by passing laws that preempt local bans on fracking should be wary of trying to block local incorporation of state environmental laws. Arguably, state preemption of local fracking vetoes is a legitimate use of the doctrine, since the development of the oil and gas industry is an issue with statewide economic implications that could be undermined by municipal action. However, the overuse of state preemption to overrule local authority undermines citizens’ faith in the democratic process. How can people believe their voices are being heard when industries may use their political influence to override any local law that negatively impacts them?²⁵⁶ These arguments have been developed in federalism literature, but they apply perhaps even more

254. *See id.* at 447.

255. *See id.* at 448.

256. This has been written about more extensively in the federal-state preemption context. *See, e.g.,* Adam B. Cox, *Expressivism in Federalism: A New Defense of the Anti-commandeering Rule*, 33 *LOY. L.A. L. REV.* 1309 (2000) (arguing that state dignity may be reason for the rule against commandeering); Roderick M. Hills, Jr., *Against Preemption: How Federalism Can Improve the National Legislative Process*, 82 *N.Y.U. L. REV.* 1 (2007); Mendelson, *supra* note 190; Ernest A. Young, *Two Cheers for Process Federalism*, 46 *VILL. L. REV.* 1349 (2001) (arguing that federal preemption threatens the core regulatory authority of state governments, compromising their ability to win the popular loyalty necessary to make political safeguards work).

acutely in the context of state preemption of local laws, as citizens may be more aware and invested in local—as opposed to state—matters.²⁵⁷

As Professor Ernest Young has pointed out, the role played by states in electing the national government is an important political check on the power of that government, but it is arguably not as powerful a check as the “sentiments of the people.”²⁵⁸ In Professor Young’s view, the real political check on national power by the states involves two prongs: first, a process by which states can actually have an impact on national lawmaking and second, a guarantee that national actors can be held accountable for their actions after the laws are made.²⁵⁹ The latter idea—accountability—is particularly relevant for this Article. The reason why a local government might want to incorporate state environmental laws is because, despite the existence of a process (local election of state officials) that ensures a local voice in the state legislature, there is no satisfactory way to hold state actors accountable for enforcing the laws they have passed. Local incorporation allows for local enforcement, which is one way to guarantee that commercial actors will comply with the requirements set out by state laws.

If, however, states were to use preemption as an argument for preventing local incorporation of state laws, especially when the state itself has failed to enforce those laws, citizen confidence in the political process would be eroded. As Professor Roderick Hills has pointed out, industry interest groups, whose constituents have an interest in shaping favorable policies, frequently push federal regulation that preempts state law.²⁶⁰ The use of federal preemption thus puts a stop to the state “laboratory,” where new ideas, policies, and regulatory schemes may be experimented with to meet evolving challenges posed by those industries.²⁶¹ Further, federal preemption of state law often fails to account for the fact that states—often certain states in particular—are the entities that feel the impact of the negative externalities produced by these same industries.²⁶²

This is particularly true for fracking. Only cities and towns located on shale plays actually see fracking activity within their borders; other municipalities in the same state may benefit economically from the development of oil and gas wells in those areas, but they will not experience the same negative environmental impact. Thus, while it may be more defensible to utilize state preemption with respect to local oil and gas

257. *See supra* note 256.

258. *See* Young, *supra* note 256, at 1355–56 (discussing the emphasis that James Madison places on popular opinion as a political check in *The Federalist Papers*). Professor Young points out that Madison did not believe that the division of power between the federal and state governments was as important as the will of the people. *Id.* at 1356 (“[T]he event in every case, should be supposed to depend on the sentiments and sanction of their common constituents.” (quoting THE FEDERALIST NO. 46, at 315 (James Madison) (J.E. Cooke ed., 1977))).

259. *See id.* at 1357.

260. Hills, *supra* note 256, at 28.

261. *See id.* at 25.

262. *See id.* at 26–27. Hills makes an efficiency-based argument that Congress should consider the comparative state and national costs of federal regulation when deciding where regulatory authority over a particular subject matter should rest. *See id.* at 29–32.

regulations, the same cannot be said for environmental regulations, especially in municipalities where fracking is actually taking place. If states were to attempt to preempt local incorporation of state environmental laws in such municipalities, it would likely be without real accounting for the disproportionate negative impact that fracking has on those municipalities. In addition to being arguably inefficient, state preemption in this context overrules the will of local citizens and erodes the political check on state control of what are essentially local matters.

CONCLUSION

Local problems require local solutions. In states where direct local regulation of oil and gas activities has been prohibited by the state in an attempt to stop bans on fracking and other carbon projects, cities and towns should seek alternative ways to take action. It has long been within the police power of municipalities to protect the health, safety, and welfare of their citizens, particularly when there are uniquely local activities at issue that may have a disproportionately negative impact on the people living close to those activities. As an extension of this police power, municipal governments can consider incorporating state environmental laws to ensure that those laws are being enforced vis-à-vis individuals and companies operating within those local borders. Doing this should not be preempted by state bans on local regulation of oil and gas, because the regulation does not apply directly to extractive operations. Further, because the local governments are simply enforcing existing state law, there should be no issue of preemption by those state laws, either express or implied.