

***Frack Off! Is Municipal Zoning a Significant Threat to Hydraulic Fracturing
in Michigan?***

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“The state may mould local institutions according to its views of policy and expediency; but local government is a matter of absolute right; and the state cannot take it away.”

-Judge Thomas Cooley¹

INTRODUCTION

A. The Battle Between Grace and Hope

The State of Grace is rich with natural gas deposits deep underground. After a lengthy economic recession, the State is looking for ways to attract outside business interests and simultaneously create jobs for its citizens. One way for the State of Grace to meet these goals is by harnessing its natural resources, including natural gas. The State has recently sold off a few hundred thousand acres of previously state-owned land to developers. Many of those developers intend to lease their acreages to gas companies who, in addition to paying rent on the properties, will also drill natural gas wells and pay the land owners royalties on the gas their land produces.

Some of the recently sold land sits in the tranquil community of Hope. A few of Hope's land-owning residents are following the State's lead and have decided to lease portions of their properties to gas companies in exchange for lease payments and production royalties. But some other Hope residents have been doing some reading on the internet about natural gas development and discovered that one of the techniques used by gas operators to drill wells is somewhat controversial. In fact, the residents learn that harsh chemicals are frequently used to help access the natural gas underground, and that without adequate protective measures in place, it may be possible for some of those chemicals to find their way into private wells, aquifers, or rivers. Because of all the media attention on new natural gas development in the State, the Hope residents discover that other individuals in cities and towns across the State are fearful of the repercussions of natural gas drilling in their areas. As such, the concerned citizens of Hope

¹ People ex rel. Le Roy v. Hurlbut, 24 Mich. 44 (1871).

decide to take matters into their own hands and bring the issue to the City Council. At the next City Council meeting, the drilling issue is discussed, and the Council enacts a new ordinance that completely prohibits gas operators from drilling new wells in Hope.

Needless to say, many of Hope's residents are ecstatic with this new law. Yet, there are many others in the Hope community who find this law to be a travesty, including those who recently leased their land to gas companies in order to make a profit. In addition, the private developers who purchased land from the State are also very upset that all of their potential business has been extinguished by the new ordinance. Finally, State officials are frustrated by Hope's zoning ordinance for a number of reasons. It reduces the possibility of job creation in that area of the State, it sends a signal to outside businesses, including other gas companies, that they are not wanted, and it sets a dangerous precedent for the other cities in the State that have gas development potential. Accordingly, the stage is set for an epic legal battle pitting the State's authority and interest in developing natural resources, creating jobs, and regulating mining against the local government's authority to enact regulations consistent with what its residents desire. A similar conflict may soon be making headlines in Michigan.

B. A Real Controversy

The United States is on a mission to explore and develop alternative sources of energy.² This has led to a boon in natural gas development that now stretches across 31 states.³ As such,

² See President Barack Obama's State of the Union Address Jan. 24, 2012, <http://www.whitehouse.gov/photos-and-video/video/2012/01/25/2012-state-union-address-enhanced-version#transcript> ("Nowhere is the promise of innovation greater than in American-made energy. Over the last three years, we've opened millions of new acres for oil and gas exploration, and tonight, I'm directing my administration to open more than 75 percent of our potential offshore oil and gas resources We have a supply of natural gas that can last America nearly one hundred years, and my administration will take every possible action to safely develop this energy. Experts believe this will support more than 600,000 jobs by the end of the decade. And I'm requiring all companies that drill for gas on public lands to disclose the chemicals they use. America will develop this resource without putting the health and safety of our citizens at risk. The development of natural gas will create jobs and power trucks and factories that are cleaner and cheaper, proving that we don't have to choose between our environment and our economy.")

conflicts similar to that described above between state and local governments have recently been playing out in New York, Pennsylvania, and West Virginia.⁴ In response to natural gas development in those states, and gas operators' use of a controversial method of extraction known as high-volume hydraulic fracturing, or "fracking," municipalities have attempted to draw on their home rule and zoning authority in order to zone out gas operators.⁵ These local efforts have met with stiff resistance from states asserting that regulating gas mining is a state function and not a local function.

Fracking is the most common technique for tapping natural gas reserves in underground shale formations. It is used in approximately nine out of ten natural gas wells in the United States.⁶ Here is how it works: Generally, after a well has been drilled, cement casings are poured into the well in order to protect the integrity of the well, separate it from any nearby aquifers, and prevent methane migration from any nearby old, abandoned wells.⁷ Gas operators then use hydraulic pressure to inject thousands of gallons of water⁸ and proprietary chemical combinations into the well in order to break through the sealed cement casings and open up fissures in the shale to increase the flow of gas trapped between the shale rock.⁹ Drilling generally begins vertically, and then the well turns horizontally in order to create better access to

³ *Gas Drilling: The Story So Far*, PRO PUBLICA, June 26, 2010, <http://www.propublica.org/article/gas-drilling-the-story-so-far>.

⁴ Erica Levine Powers, *Home Rule Meets State Regulation: Reflections on High Volume Hydraulic Fracturing for Natural Gas*, ABA STATE & LOCAL LAW NEWS, Vol. 35 No. 2, http://www.americanbar.org/publications/state_local_law_news/2011_12/winter_2012/home_rule_state_regulation.html.

⁵ Powers, *supra* note 4.

⁶ *What is Hydraulic Fracturing*, PRO PUBLICA, <http://www.propublica.org/special/hydraulic-fracturing-national>.

⁷ Powers, *supra* note 4.

⁸ It has been estimated that operators need between 300,000 gallons and 600,000 gallons of water for each stage of drilling a horizontal well, and because the wells are drilled in multiple stages, this could require millions of gallons of water at each drill site. *See* Powers, *supra* note 4.

⁹ Powers, *supra* note 4.

the shale rock.¹⁰ The depth of such wells ranges from a few hundred feet to 10,000 feet or more.¹¹

The most controversial aspect of fracking is the combination of chemicals that operators use. In addition to water and sand, operators also add a variety of chemicals that help to dissolve rock, prop open the fissures, prevent clay from shifting, prevent corrosion of the pipe, eliminate bacteria in the water and so forth.¹² Because these chemicals are shot underground at high force and in high volumes, one potential problem is that they will find their way into drinking water supplies, or contaminate the land in some other way.¹³ Such problems have been associated with fracking in several states.¹⁴ A second aspect of this potential problem is that operators are mainly exempt from federal environmental laws protecting drinking water.¹⁵ And any wastes resulting from the fracking process may also be exempt from regulation under a variety of other federal laws.¹⁶ Since fracking has become more of a mainstream issue, gas operators are now voluntarily disclosing the majority of the chemicals they use in the process in an effort to educate

¹⁰ *What is Hydraulic Fracturing*, *supra* note 5.

¹¹ *What is Hydraulic Fracturing*, *supra* note 5.

¹² *See generally*, <http://www.fracfocus.org>.

¹³ Abraham Lustgarten, *Years After Evidence of Fracking Contamination, EPA to Supply Drinking Water to Homes in Pa. Town*, PRO PUBLICA, Jan. 20, 2012, <http://www.propublica.org/article/years-after-evidence-of-fracking-contamination-epa-to-supply-drinking-water> (detailing the plight of Dimock, Pennsylvania where a number of drinking wells were allegedly compromised during hydraulic fracturing in the area.).

¹⁴ Lustgarten, *supra* note 13.

¹⁵ *See generally*, 42 U.S.C. 300h(d) (specifically exempting hydraulic fracturing from regulation under the SDWA).

¹⁶ *See generally*, 42 U.S.C. 6921(b)(2)(A); *see also* 58 F.R. 15284-01 (clarifying the natural gas mining exemptions: “A simple rule of thumb for determining the scope of the exemption is whether the waste in question has come from down-hole (i.e., brought to the surface during oil and gas E&P operations) or has otherwise been generated by contact with the oil and gas production stream during the removal of produced water or other contaminants from the product . . . [i]f the answer to either question is yes, the waste is most likely considered exempt.”).

the public.¹⁷ Regardless of such voluntary or mandated disclosures however, this method of gas extraction still generates anxiety in the communities where it occurs.¹⁸

As discussed below, Michigan communities have started to feel this anxiety in light of the current push by the State to create more opportunities for gas companies to drill new wells.¹⁹ Accordingly, it is only a matter of time before Michigan municipalities attempt to zone out gas operators who are intent on developing natural gas in Michigan. Thus, a major question addressed in this paper is whether Michigan zoning law, in combination with local authority under the home rule doctrine, permits municipalities to zone-out natural gas operations. Part I briefly explains the history of the municipal home rule doctrine and discusses the background of home rule in Michigan, including the constitutional and statutory provisions that established municipal entitlement to home rule. Part I also discusses local authority to enact zoning regulations under the Michigan Zoning Enabling Act and a recent legislative enactment that appears to limit local power and autonomy related to restrictions on natural resource extraction. Finally, Part I concludes that in most cases, Michigan's grant of authority to municipalities under home rule and the Zoning Enabling Act is likely insufficient to sustain local zoning regulations related to natural gas mining and production because such zoning would be subject to heightened judicial scrutiny. Additionally, Michigan's home rule doctrine is unlikely to provide much assistance in bolstering local power and autonomy in the face of such searching judicial review.

¹⁷ See generally, <http://www.fracfocus.org> (the "national hydraulic fracturing chemical registry" featuring background on the fracking process, explanation of why it is used, an inventory of gas wells by state with reports of the chemicals used at those wells, and a catalogue of state regulations related to fracking).

¹⁸ Abraham Lustgarten, *Fracking Cracks the Public Consciousness in 2011*, PROPUBLICA, Dec. 29, 2011, <http://www.propublica.org/article/fracking-cracks-the-public-consciousness-in-2011> (stating that 2011 was "the year that 'fracking' became a household word."). See also, Bryan Walsh, *Mark Ruffalo, Anthony Ingraffea, Robert Howarth*, TIME, Dec. 14, 2011, http://www.time.com/time/specials/packages/article/0,28804,2101745_2102309_2102323,00.html (declaring that the biggest environmental issue of 2011 was hydraulic fracturing).

¹⁹ Jay Greene, *Fracking in Michigan Appears on the Upswing*, CRAIN'S DETROIT BUSINESS, May 27, 2011, <http://www.craindetroit.com/article/20110527/STAFFBLOG10/110529913/fracking-in-michigan-appears-on-the-upswing>.

If a municipal ordinance managed to survive such scrutiny, its zoning regulations would also be vulnerable to a preemption challenge. Part II therefore discusses the history of hydraulic fracturing in Michigan, the legislation that gave the State the authority to regulate oil and gas mining and court decisions interpreting the conflict between state environmental legislation and local zoning. Part II concludes that a local ordinance that survives heightened judicial scrutiny is still likely to be struck down under preemption principles in light of the State's broad policy priorities related to regulating the environment and natural resources.

I. HOME RULE AND ZONING IN MICHIGAN

A. What is Home Rule?

The basic idea of home rule is that localities should have some measure of autonomy apart from the state in order to govern their own affairs with little or no state interference.²⁰ This is in contrast to Dillon's Rule, which generally provides that localities are merely agents of the state and wholly subject to state legislative control.²¹ In the absence of a home rule constitutional provision or statute, Dillon's Rule provides the default relationship between states and localities.²² States providing for home rule generally do so through a constitutional amendment or through implementing statutes or both.²³

Home rule doctrines vary from state to state, but in general, home rule can be classified into two categories—imperio and legislative.²⁴ Imperio home rule is the original form of home rule, and it encompasses two distinct areas of interests and powers for states and localities

²⁰ Kenneth E. Vanlandingham, *Municipal Home Rule In the United States*, 10 WM. & MARY L. REV. 269, 269-70 (1968).

²¹ Vanlandingham, *supra* note 20.

²² Vanlandingham, *supra* note 20.

²³ RICHARD BRIFFAULT & LAURIE REYNOLDS, *CASES AND MATERIALS ON STATE AND LOCAL GOVERNMENT* LAW 317 (7th ed. 2009).

²⁴ BRIFFAULT & REYNOLDS, *supra* note 22, at 317; The name is derived from the Supreme Court's description of St. Louis's home rule system as "imperium in imperio." *St. Louis v. Western Union Tel. Co.*, 149 U.S. 465, 468 (1893)).

respectively.²⁵ Under the imperio system, it is the courts that determine where local authority ends and state authority begins.²⁶ Early constitutional amendments providing for imperio home rule generally provide that local legislatures can legislate with respect to “municipal affairs,” or “local affairs and government.” These terms were largely undefined, and so it was up to the courts to determine what was local in nature. Accordingly, this scheme was criticized because of its potential for judicial intermeddling.²⁷

As such, in the 1950s and 60s, the American Municipal Association (later the National Municipal League) introduced the concept of “legislative home rule.”²⁸ It envisioned a reduced role for the courts, and was rooted in the idea that “home rule should provide local governments with the full range of government powers that the state is capable of transferring to its political subdivision,” with only the state legislature, not the courts, having the ability to limit the reach of such power.²⁹ Generally, legislative home rule is provided for in a constitutional amendment and incorporates language to the effect that “a city may exercise any legislative power not denied by general law.”³⁰

Notably, the imperio/legislative dichotomy is not a bright line, and many state constitutional amendments provide for a blend of imperio and legislative home rule. Further, “Deferential courts in imperio states may allow as much local experimentation and initiative as courts in legislative home rules states.”³¹ Regardless of the imperio/legislative classification,

²⁵ Laurie Reynolds, *Home Rule, Extraterritorial Impact, and the Region*, 86 DENV. U. L. REV. 1271, 1275 (2009).

²⁶ BRIFFAULT & REYNOLDS, *supra* note 23, at 332.

²⁷ Reynolds, *supra* note 25.

²⁸ Reynolds, *supra* note 25.

²⁹ Reynolds, *supra* note 25.

³⁰ BRIFFAULT & REYNOLDS, *supra* note 23, at 333.

³¹ BRIFFAULT & REYNOLDS, *supra* note 23, at 335.

courts still have a role to play when deciding legal challenges to local ordinances, including when state and local laws conflict and the question is whether a state law preempts a local law.³²

B. Home Rule in Michigan

Michigan might be classified as an imperio home rule state based on the language of the statutory and constitutional provisions granting home rule authority.³³ In 1908, Michigan became the eighth state to enact home rule principles when it adopted the 1908 Constitution.³⁴ Article VIII section 21 of that Constitution gave cities and villages the ability to “pass all laws and ordinances **relating to its municipal concerns**, subject to the constitution and general laws of this state.”³⁵ In 1909, the Michigan Legislature followed suit and enacted the Home Rule City Act³⁶ and Home Rule Village Act.³⁷ These laws established the basic framework for municipalities and villages to use when adopting or amending their charters in order to exercise their powers to enact laws and ordinances regarding local needs.³⁸ One provision of the Home

³² Importantly, preemption analysis in this context depends upon whether the state has provided for a form of imperio or legislative home rule. Generally, courts inquiring whether a state law preempts a local law or act perform a two-step inquiry. First, they determine whether the local action was within its home rule powers. Second, if the court finds the local action valid, they then have to determine whether it was preempted by state law. While the general two-step framework used by courts may be the same in both imperio and legislative home rule states, the court has to ask different questions within each step depending upon whether the locality operates under imperio or legislative home rule. In step-one under an imperio system, the court inquires whether the matter is inherently “local” in character, or whether it pertains to local affairs. If the local act is determined to be “exclusively” local, then under the imperio system, the local act is immunized from preemption. The courts accord immunity to the local act even if the legislature has somehow indicated a contrary intent. If the local act is not exclusively local, but merely regards a local matter, then in step two, the court applies principles of express, conflict, and field preemption to determine if the local act has been preempted by state law. By contrast, under legislative home rule, the court’s initial inquiry is not whether the local act is “local” in character, but whether the power exercised by the locality is one that the legislature was capable of transferring. If so, then the court determines whether the legislature has clearly articulated its intent to supersede local law, either by prohibiting a specific act at the local level or by expressly stating that state law is exclusive on the matter. See Reynolds, *supra* note 24, at 1276-77.

³³ Although, as discussed in I.A., *supra*, the imperio/legislative dichotomy is not a bright line and it may be the case that in some instances courts may allow for more local experimentation and in other instances courts may strictly look to whether an action pertained to municipal affairs.

³⁴ Michigan Municipal League, *Home Rule in Michigan—Then and Now*, July 2006.

³⁵ MICH. CONST. of 1908, art. VIII, § 21 (1908) (emphasis added) (The 1850 Constitution also gave the Legislature the ability to delegate legislative and administrative powers to the counties.). See John A. Fairlie, *Home Rule In Michigan*, 4 AMERICAN POLITICAL SCIENCE REVIEW 119-123 (1910).

³⁶ P.A. 279 of 1909.

³⁷ P.A. 278 of 1909.

³⁸ P.A. 279 of 1909; Michigan Municipal League, *Home Rule in Michigan—Then and Now*, July 2006.

Rule City Act mirrors Article VIII section 21 of the Constitution and states that the charter may provide: “for any act to advance the interests of the city, the good government of the municipality and its inhabitants, and through its regularly constituted authority to pass all laws and ordinances **relating to its municipal concerns** subject to the constitution and general laws of the state.”³⁹

In 1963, Michigan adopted a new Constitution and included additional home rule provisions that seemed to broaden the doctrine. For example, Article VII, section 22 of the 1963 Constitution basically adopted Article VIII, section 21 of the 1908 Constitution verbatim, but added the caveat that “Each such city and village shall have the power to adopt resolutions and ordinances relating to its municipal concerns, property and government **subject to constitution and law.**”⁴⁰ Notably, the Convention Comment discussing the adoption of section 22 stated: “This . . . revision . . . reflects Michigan's successful experience with home rule. The new language is a more positive statement of municipal powers, giving home rule cities and villages **full power** over their own property and government, subject to this constitution and law.”⁴¹

Section 22’s “full power” to cities and villages rationale also seemed to be evident in another new addition to the 1963 Constitution, Article VII section 34. Section 34 appears to broaden the grant of power to municipal authorities by stating: “The provisions of this constitution and law concerning counties, townships, cities, and villages shall be liberally construed in their favor.”⁴² That section also included a grant of additional authority to counties

³⁹ P.A. 279 of 1909, § 117.4j (emphasis added).

⁴⁰ MICH. CONST. of 1963, art. VII, § 22 (1963) (emphasis added).

⁴¹ MICH. CONST. of 1963, art. VII, § 22 (1963) (emphasis added), Convention Comment.

⁴² MICH. CONST. of 1963, art. VII, § 34 (1963).

and townships: “Powers granted to counties and townships by this constitution and by law shall include those fairly implied and not prohibited by this constitution.”⁴³

In sum, the original statutory and constitutional grants of authority to Michigan municipalities and villages were broad in scope and were to be liberally construed. They gave localities power over their property, government and any other local concerns that advanced the interests of the city or its inhabitants.⁴⁴ The only express limitations on this power were Constitutional or statutory. In other words, so long as a local ordinance pertained to “municipal concerns” and was not prohibited by the legislature or violative of the Constitution, it was at least theoretically permissible.

Based on the constitutional and statutory language providing for home rule, Michigan could likely be classified as an imperio home rule state.⁴⁵ Thus judicial review of a local enactment in the preemption context would first focus on whether the local ordinance was inherently local in character or pertained to local affairs.⁴⁶ If a court were to determine that the ordinance pertained to a matter that was exclusively local, then the act would be immunized from any preemption challenge. However, if the ordinance was not exclusively local but merely related to local affairs, then in the preemption context, a reviewing court would conduct standard preemption analysis.⁴⁷

⁴³ MICH. CONST. of 1963, art. VII, § 34 (1963) (emphasis added). The Convention Comment on section 34 stated: “This is a new section intended to direct the courts to give a liberal or broad construction to statutes and constitutional provisions concerning all local governments. Home rule cities and villages already enjoy a broad construction of their powers and it is the intention here to extend to counties and townships within the powers granted to them equivalent latitude in the interpretation of the constitution and statutes.”

⁴⁴ P.A. 279 of 1909, § 117.4j.

⁴⁵ See *supra* section I.A.

⁴⁶ Reynolds, *supra* note 25, at 1277.

⁴⁷ Reynolds, *supra* note 25, at 1277. In Michigan, that generally means a municipality is precluded from enacting an ordinance if (1) the ordinance is in direct conflict with the state statutory scheme, or (2) the state statutory scheme preempts the ordinance by occupying the field of regulation that the municipality seeks to enter, even if there is no direct conflict between the two schemes of regulation. *People v. Llewellyn*, 257 N.W.2d 902 (Mich. 1977).

Regardless of whether a challenge to zoning is on preemption grounds, the court still has a significant role to play in determining whether an ordinance was validly enacted and lawful in scope. The Michigan Zoning Enabling Act provides localities with the power to enact ordinances like those potentially at issue here related to hydraulic fracturing. That statute then is likely to be at the center of any litigation involving a local ordinance.

C. Zoning in Michigan

Michigan's current zoning legislation, The Michigan Zoning Enabling Act ("MZEA"),⁴⁸ was cobbled together from three previous zoning acts, The City and Village Zoning Act,⁴⁹ The County Zoning Act,⁵⁰ and the Township Rural Zoning Act.⁵¹ The MZEA states that localities may zone in order to meet state needs for "energy, and other natural resources, . . . to ensure that use of the land is situated in appropriate locations and relationships," and "to promote public health, safety, and welfare."⁵² The MZEA also states:

A zoning ordinance shall be based upon a plan designed to promote the public health, safety, and general welfare, to encourage the use of lands in accordance with their character and adaptability . . . to conserve natural resources and energy . . . to ensure that uses of the land shall be situated in appropriate locations and relationships, . . . to reduce hazards to life and property, to facilitate adequate provision for a system of transportation including, . . . safe and adequate water supply.⁵³

Additionally, a portion of the MZEA regulates the interplay between zoning and gas and oil mining. For example, Section 205(2) pertains directly to counties and townships that try to zone such mining:

A *county or township* shall not regulate or control the drilling, completion, or operation of oil or gas wells or other wells drilled for oil or gas exploration

⁴⁸ P.A. 110 of 2006, M.C.L. 125.3201 et. seq.

⁴⁹ P.A. 207 of 1921, M.C.L. 125.581 et. seq.

⁵⁰ P.A. 183 of 1943, M.C.L. 125.201 et. seq.

⁵¹ P.A. 184 of 1943, M.C.L. 125.271 et. seq.

⁵² M.C.L. 125.3201 (emphasis added).

⁵³ M.C.L. 125.3203.

purposes and shall not have jurisdiction with reference to the issuance of permits for the location, drilling, completion, operation, or abandonment of such wells.⁵⁴

This section clearly prohibits counties and townships from zoning out gas mining, but the MZEA does not contain a similar provision for cities and villages. In other words, the Legislature has not expressly prohibited cities and villages from zoning out gas mining. However, in 2011, the Legislature amended the MZEA to include an important limitation on all zoning related to mining, including in cities and villages. The new provisions state in part:

An ordinance shall not prevent the extraction, by mining, of valuable natural resources from any property unless very serious consequences would result from the extraction of those natural resources. Natural resources shall be considered valuable for the purposes of this section if a person, by extracting the natural resources, can receive revenue and reasonably expect to operate at a profit.

* * * *

In determining under this section whether very serious consequences would result from the extraction, by mining, of natural resources, the standards set forth in *Silva v Ada Township* . . . shall be applied and all of the following factors may be considered, if applicable:

- (a) The relationship of extraction and associated activities with existing land uses.
- (b) The impact on existing land uses in the vicinity of the property.
- (c) The impact on property values in the vicinity of the property and along the proposed hauling route serving the property, based on credible evidence.
- (d) The impact on pedestrian and traffic safety in the vicinity of the property and along the proposed hauling route serving the property.
- (e) The impact on other identifiable health, safety, and welfare interests in the local unit of government.
- (f) The overall public interest in the extraction of the specific natural resources on the property.⁵⁵

A 1982 Michigan Supreme Court decision in *Silva v Ada Township* provided the legal framework for the “very serious consequences rule” and the 2011 amendments quoted above.⁵⁶ However, the catalyst for those amendments was actually a 2010 Michigan Supreme Court decision overruling *Silva*. Accordingly, a brief history of the Michigan Supreme Court’s

⁵⁴ M.C.L. 125.3205(2) (emphasis added).

⁵⁵ M.C.L. 125.3205(3), (5) (emphasis added).

⁵⁶ 330 N.W.2d 663 (Mich. 1982) (*Silva* was actually two consolidated cases).

treatment of zoning regulations generally, and the very serious consequences rule in particular, including the 2010 decision leading to the MZEA amendments, would be helpful.

1. *Development of the Very Serious Consequences Rule*

As a general rule, zoning regulations in Michigan must be reasonable to be valid and to comport with substantive due process.⁵⁷ Accordingly, a city's power to zone is not absolute,⁵⁸ but courts still apply a presumption of reasonableness when reviewing the validity of an ordinance.⁵⁹ One exception to this presumption may be the very serious consequences rule. The very serious consequences rule was initially mentioned in Michigan in a 1929 case called *North Muskegon v. Miller*, which fittingly dealt with a local zoning regulation prohibiting the development of oil wells.⁶⁰ In that case, after oil was discovered within the city limits, the city passed an ordinance making it unlawful to drill for oil or gas without a permit and vesting discretion for issuing such permits in the town council.⁶¹ The council previously issued drilling permits for drilling in other parts of town. The defendants, who owned land zoned for residential and other community-type uses, were twice denied a permit to drill but drilled anyway.⁶² The city brought suit to enjoin the drilling. The defendants claimed the zoning ordinance and the drilling ordinance were both unreasonable and not within the city's police power.⁶³

The Court first concluded that the zoning ordinance (marking the land for residential and other community-type uses only) was unreasonable because the land was basically an unusable marshland next to a trash dump. Thus, the residential/community-only ordinance was invalidated. The Court also emphasized "the importance of not destroying or withholding the

⁵⁷ The rationale is that a citizen may be denied substantive due process by a city ordinance that has no reasonable basis for its very existence. *See* *Silva v. Ada Twp.*, 330 N.W.2d 663, 665 n.2 (Mich. 1982).

⁵⁸ *Kropf v. Sterling Heights*, 215 N.W.2d 179 (Mich. 1974).

⁵⁹ *Id.*

⁶⁰ 227 N.W. 743 (Mich. 1929).

⁶¹ *Id.* at 743.

⁶² *Id.*

⁶³ *Id.*

right to secure oil, gravel, or mineral from one's property, through zoning ordinances, unless some very serious consequences will follow therefrom.”⁶⁴ The Court did not say whether such consequences were present here, and it ultimately upheld the drilling ordinance as reasonable, basing its decision on the fact that evidence regarding potential danger to City’s water supply was in dispute.⁶⁵ The Court emphasized that it may have been possible for the defendants to later satisfy the town council that the drilling was safe, but that the City’s decision in light of conflicting evidence was reasonable.⁶⁶

Importantly, the opinion is unclear regarding the extent to which the Court relied on the very serious consequences rule to hold that the drilling ordinance was reasonable. The Court did not expressly say it was relying on that rule to make its determination, although, since water safety appeared to be the dispositive issue, one may be able to infer that the rule played a role in the Court’s thinking. Further, the Court also emphasized the great deference courts should give to such local matters, stating: “[T]his is a matter which is purely administrative, and it is not within our province to regulate the action of the city officials when they act within their legal rights.”⁶⁷ Clearly, the Court believed judicial review should be limited and deferential if the City was not acting illegally when enacting or enforcing ordinances. This level of deference to local actors would be eroded in subsequent decisions and be replaced by a more searching judicial review of local acts related to natural resources.

Thirty years after *Miller*, the very serious consequences rule was again discussed in two cases, *Bloomfield Twp. v. Beardslee*,⁶⁸ and *Certain-Teed Products Corp. v. Paris Twp.*⁶⁹ In

⁶⁴ *Id.* at 744, citing *Village of Terrace Park v. Errett*, 12 F.2d 240 (6th Cir. 1926).

⁶⁵ *Id.* at 746.

⁶⁶ *Miller*, 227 N.W. at 746.

⁶⁷ *Id.*

⁶⁸ 84 N.W.2d 537 (Mich. 1957). For the sake of brevity, this article only details the *Certain-Teed* opinion because the *Beardslee* decision does not alter the overall analysis of how these cases developed and led to formal adoption of the very serious consequences rule in *Silva*.

Certain-Teed, a company wanted to develop a gypsum mine in an area zoned for a variety of other uses. A city ordinance required that the company get a special permit before developing the mine.⁷⁰ The company filed two applications with the township board to construct the mine, but were denied.⁷¹ They later filed a declaratory judgment action, in part alleging that the township did not have the authority to prevent or interfere with gypsum mining performed reasonably and seeking an injunction against application of the ordinance.⁷² Similar to the *Miller* case, part of the township's defense for having denied the permits were fears about health and safety, *inter alia*, that gypsum dust would become a nuisance to surrounding neighborhoods, underground blasting could create residential damage, and truck and automobile traffic would increase.⁷³ The Company responded to the township's allegations with arguments about dust mitigation systems, off street parking, and job creation.⁷⁴

The Court considered the evidence on both sides and held in part that the township's denial of at least one of the applications was arbitrary and capricious because there was no showing that the mining would result in injury to the public health or welfare given the company's showing that it could (at least in theory) protect against most of the township's concerns. The Court reasoned that because zoning is founded on the locality's police power, any restrictions on land use would have to be justified by a detriment to the "health, welfare and morals of the people of the surrounding community."⁷⁵ It therefore concluded: "the test of constitutionality of a zoning ordinance is its reasonable relationship to the good and welfare of

⁶⁹ 88 N.W.2d 705 (Mich. 1958).

⁷⁰ *Id.* at 708.

⁷¹ *Id.*

⁷² *Id.*

⁷³ *Id.* at 709.

⁷⁴ *Id.*

⁷⁵ *Certain-Teed*, 88 N.W.2d at 717.

the general public.”⁷⁶ While the majority also affirmed a heightened standard of review for zoning related to mining, arguing, “[t]o sustain the ordinance in such case, there must be some dire need, which if denied the ordained protection, will result in ‘very serious consequences,’”⁷⁷ the majority did not expressly rely on this standard to find the permit denials arbitrary and capricious.

Notably, *Certain-Teed* presented a different role for courts reviewing municipal zoning related to mining than what the *Miller* Court espoused. In *Miller*, the Court expressly took a hands-off, deferential approach to reviewing a drilling ordinance in the face of conflicting evidence about the danger to community health and safety through potential contamination of the water supply. The Court expressly announced that it was not the province of the courts to second-guess local authorities acting lawfully, and thus it was giving complete deference to the town counsel’s decision to deny the drilling permit even though there was evidence that the defendants could drill safely. By contrast, under very similar circumstances, the *Certain-Teed* Court took on the task of weighing conflicting evidence about the safety of the mining, and on the basis of that evidence, declared the township’s permit denial arbitrary and capricious. Arguably, the *Certain-Teed* Court believed courts should play a much more active role in reviewing local ordinances and decisions related to mining. In fact, the majority opinion remanded the case to the chancery court with instructions to oversee the mining and assure that the company followed through on its promises.⁷⁸ Certainly, this type of judicial oversight was not present in *Miller* and is contrary to the *Miller* Court’s express rationale.

⁷⁶ *Id.* at 718.

⁷⁷ *Id.* at 722 (Black, J. concurring and dissenting).

⁷⁸ *Id.* at 725.

Twenty-four years after *Certain-Teed*, the Court again addressed the very serious consequences rule in *Silva v. Ada Township*.⁷⁹ There the Court expressly relied on the very serious consequences rule in invalidating two different zoning ordinances. To open its opinion the Court stated, “We reaffirm the rule of *Certain-teed Products Corp. v. Paris Twp.*, . . . that zoning regulations which prevent the extraction of natural resources are invalid unless ‘very serious consequences’ will result from the proposed extraction.”⁸⁰ Later, the Court again reiterated, “We again reaffirm the ‘very serious consequences’ rule of *Miller* and *Certain-teed*.”⁸¹ Arguably, this was the first time the Court expressly held the very serious consequences rule was outcome-determinative. In the prior cases, the Court recited the rule in the opinion but did not squarely hold that the rule was dispositive or in any way controlled the outcome. As such, recitation of the rule in those opinions could be seen as dicta. Regardless, the *Silva* majority did not think this was the case. The majority gave short shrift to the actual factual nuances of the cases it was deciding and instead focused much of its opinion on the policy reasons for adopting a heightened standard of review for zoning regulations related to natural resource extraction:

Preventing the extraction of natural resources harms the interests of the public as well as those of the property owner by making natural resources more expensive. Because the cost of transporting some natural resources (*e.g.*, gravel) may be a significant factor, locally obtained resources may be less expensive than those which must be transported long distances. It appears that the silica sand involved in one of the cases here on appeal is unique in quality and location.

In most cases, where natural resources are found the land will be suited for some other use and can reasonably be devoted to that use. *Unless a higher standard is required*, natural resources could be extracted only with the consent of local authorities or in the rare case where the land cannot be reasonably used in some other manner. The public interest of the citizens of this state who do not reside in the community where natural resources are located in the development and use of natural resources requires closer scrutiny of local zoning regulations which prevent development. In this connection, we note that extraction of

⁷⁹ 330 N.W.2d 663 (Mich. 1982) (*Silva* was actually two consolidated cases).

⁸⁰ *Id.* at 663.

⁸¹ *Id.* at 666.

natural resources is frequently a temporary use of the land and that the land can often be restored for other uses and appropriate assurances with adequate security can properly be demanded as a precondition to the commencement of extraction operations.⁸²

A separate opinion in the case questioned the majority's reliance on the rule and argued that in *Miller* and *Certain-Teed*, discussion of the rule was obiter dictum.⁸³ Despite these concerns, it was clear that the *Miller—Certain-Teed—Silva* line of cases made it much more difficult for localities to use zoning to limit the extraction of natural resources. Twenty-eight years after *Silva*, the Court took notice of this difficulty and expressly overruled *Silva* in *Kyser v. Township*.⁸⁴

In *Kyser*, the township of Kasson, which was rich with gravel and sand, tried to establish a gravel mining policy by creating a gravel mining district.⁸⁵ Edith Kyser owned land ripe for gravel mining, but her land was adjacent to the gravel mining district.⁸⁶ She petitioned the township to expand the district to incorporate the area of her property she wished to mine, but the township denied her application.⁸⁷ It reasoned that expanding the district would undermine its comprehensive plan and would also prompt other property owners to request similar extensions.⁸⁸ Kyser filed an action challenging the denial of her application and arguing that no very serious consequences would have resulted from the mining thus the denial was unreasonable.⁸⁹ The township countered with familiar arguments alleging that allowing the mining would result in traffic safety problems, noise issues, and negative impacts on surrounding

⁸² *Id.* at 666 (emphasis added).

⁸³ *Id.* at 668 (Ryan, J. concurring and dissenting).

⁸⁴ 786 N.W.2d 543 (Mich. 2010).

⁸⁵ *Id.* at 546.

⁸⁶ *Id.*

⁸⁷ *Id.*

⁸⁸ *Id.*

⁸⁹ *Id.* at 546.

property values and residential development.⁹⁰ The trial court agreed with Kyser that no very serious consequences would result and enjoined enforcement of the zoning ordinance.⁹¹

The Michigan Supreme Court began its analysis by emphasizing zoning's legislative character and reinforcing, akin to *Miller*, that judicial review of zoning should be limited, stating: “[t]he people of the community, through their appropriate legislative body, and not the courts, govern its growth and its life.”⁹² The Court also discussed that zoning has certain other limitations, most predominantly constitutional due process, that may not require the kind of heightened standard of review applied in earlier cases. After setting forth a brief history of the very serious consequences rule, the Court concluded that the rule was not constitutionally required, violated separation of powers principles, and was preempted by M.C.L. 125.3207 (dealing with zoning that totally prohibits a land use).⁹³

First, with respect to constitutional requirements, the Court reasoned that the very serious consequences rule was not required to satisfy due process, but in fact elevated the natural resources aspect of public interest above other public interests. The Court concluded that such a rule was not required to satisfy due process, but that the standard rule for reviewing local ordinances for consistency with due process would suffice. According to the Court, that rule requires “a zoning ordinance be reasonably designed and administered to protect the public health, safety, and welfare of the community, and that fair procedures be accorded to participants in the process.”⁹⁴

Next, the Court reasoned that the *Silva* Court's adoption of the very serious consequences rule was essentially a judicial declaration establishing a statewide policy preferring natural

⁹⁰ *Kyser*, 786 N.W.2d at 547.

⁹¹ *Id.*

⁹² *Id.* at 548, quoting *Brae Burn, Inc. v. Bloomfield Hills*, 86 N.W.2d 166 (Mich. 1957).

⁹³ *Id.* at 543.

⁹⁴ *Id.* at 554.

resource extraction to alternative policies and therefore ran afoul of separation of powers principles.⁹⁵ The Court argued that the Constitution vested decisions about the environment and natural resources in the Legislature.⁹⁶ Accordingly, the very serious consequences rule “usurps the responsibilities belonging to both the Legislature and to self-governing local communities.”⁹⁷ The Court also argued that the rule requires courts to become involved in land-use planning issues that concern communities across the state, and then to balance those issues in order to reach a conclusion about whether the very serious consequences rule has been satisfied or not. This is an area, the Court concluded, where courts have little expertise.⁹⁸

Finally, the Court reasoned that the Legislature preempted the common law very serious consequences rule when it enacted the exclusionary zoning provision in the MZEA.⁹⁹ That provision provides that an ordinance cannot “totally prohibit” a particular land use where there is a demonstrated need for the use, unless there is no “appropriate” location or the use is unlawful.¹⁰⁰ The Court concluded:

[T]he ZEA is a comprehensive law that empowers localities to zone, sets forth in detail the development of zoning plans within a community, and specifically limits the zoning power in particular circumstances. The Legislature clearly intended for localities to regulate land uses, including the extraction of natural resources other than oil and gas.¹⁰¹

The *Kyser* decision arguably reinvigorated local power and autonomy to enact zoning limitations with respect to natural resources. Additionally, in a throwback to the *Miller* decision, it reinforced the limited role of the courts in reviewing local ordinances. But its effects were short-lived. Immediately after *Kyser* overruled *Silva* and dispatched the very serious

⁹⁵ *Id.* at 556.

⁹⁶ *Kyser*, 786 N.W.2d at 556.

⁹⁷ *Id.* at 557.

⁹⁸ *Id.*

⁹⁹ M.C.L. 125.3207.

¹⁰⁰ *Kyser*, 786 N.W.2d at 558, *citing* M.C.L. 125.3207.

¹⁰¹ *Id.* at 560.

consequences rule, the Legislature acted to codify the rule in order to return the law to its pre-Kyser state. As stated above, the MZEA now reads:

An ordinance shall not prevent the extraction, by mining, of valuable natural resources from any property unless very serious consequences would result from the extraction of those natural resources. Natural resources shall be considered valuable for the purposes of this section if a person, by extracting the natural resources, can receive revenue and reasonably expect to operate at a profit.

* * * *

In determining under this section whether very serious consequences would result from the extraction, by mining, of natural resources, the standards set forth in *Silva v Ada Township* . . .¹⁰²

Accordingly, the statute illustrates that a city would probably face significant hurdles defending a zoning ordinance that prohibits gas drilling.¹⁰³ Basically, the Legislature has created two statutory hurdles for any zoning ordinance directed at mining—the very serious consequences rule and the exclusionary zoning prohibition.

Thus, in order to defeat a challenge to zoning related to fracking, a municipality would first have to argue that very serious consequences would result from the drilling, for example perhaps by alleging ground water contamination or some other impact on health, safety and welfare of the people. But case law is unclear with respect to exactly what would be sufficient to be a very serious consequence. Regardless, a city establishing the existence of a very serious consequence would at least get the over that initial statutory hurdle.

Second, so long as the city does not totally prohibit gas drilling, some piecemeal restrictions may be appropriate (subject of course to the very serious consequences rule). Additionally, cities *may* completely prohibit gas drilling if there are no possible locations for

¹⁰² M.C.L. 125.3205(3), (5) (emphasis added).

¹⁰³ The statute itself and the “Legislative Analysis” that accompanied the bill indicates that the rule is not meant to limit local regulation of hours of operation, blasting hours, noise levels, dust control measures, and traffic, “not preempted by Part 632 of the Natural Resources and Environmental Protection Act.” Summary of HB 4746 as Enacted at 1. The Analysis also states that “House Bill 4746 would . . . return to the . . . standard that existed prior to the 2010 Supreme Court decision. This presumably would restore a higher standard for local units of government to meet when regulating mining.” Summary of HB 4746 at 2.

such wells to be “appropriately” located (again, presumptively subject to the very serious consequences rule). The precise contours of the rule as applied to fracking are somewhat uncertain and will likely have to be developed through litigation. What *is* clear is that because the rule has been codified, courts will have to apply a heightened standard of review to such zoning, and that this is likely to impose a significant hurdle for localities that want to zone-out fracking.

2. *Searching Judicial Review Under the Very Serious Consequences Rule Makes It Difficult for Cities and Villages to Rely On Home Rule or Local Zoning Powers to Zone-Out Fracking.*

If a Michigan locality were to enact an ordinance completely prohibiting hydraulic fracturing, current law indicates that such an ordinance would be struck down for a number of reasons. First, when the Legislature codified the very serious consequences rule in the MZEA, the legislature reaffirmed a heightened standard of judicial scrutiny for local regulations that prevent natural resource extraction. This heightened standard requires courts to conduct a case-by-case balancing of the future benefits and harms from any such restriction.¹⁰⁴ This balancing test only adds to uncertainty about the validity of an ordinance at the time a city adopts it.¹⁰⁵

¹⁰⁴ This manner of heightened review is analogous to “Hard Look Review” that courts give to federal administrative agency decisions, only here, rather than giving a hard look to an agency decision, the court is giving a hard look to the city’s evidence that very serious consequences would result from the zoned-out activity. The United States Court of Appeals for the District of Columbia Circuit provided a summary of this type of review in the context of reviewing an environmental rule: “[judicial review should] evince a concern that variables be accounted for, that the representativeness of test conditions be ascertained, that the validity of tests be assured and the statistical significance of results determined. Collectively, these concerns have sometimes been expressed as a need for ‘reasoned decision-making.’ . . . However expressed, these more substantive concerns have been coupled with a requirement that assumptions be stated, that process be revealed, that the rejection of alternate theories or abandonment of alternate course of action be explained and that the rationale for the ultimate decision be set forth in a manner which permits the . . . courts to exercise their statutory responsibility upon review.” *Nat’l Lime Assn. v. Environmental Protection Agency*, 627 F.2d 416, 453 (D.C. Cir. 1980). This analogy to hard look review may provide further guidance to Michigan courts employing the very serious consequences rule in challenges to local zoning especially given the number of statutory factors courts are to employ in undertaking such review. *See* note 104 *infra*.

¹⁰⁵ The statute sets forth the following factors for determining whether very serious consequences would result from the mining. (a) The relationship of extraction and associated activities with existing land uses; (b) The impact on existing land uses in the vicinity of the property; (c) The impact on property values in the vicinity of the property and along the proposed hauling route serving the property, based on credible evidence; (d) The impact on

Additionally, the MZEA and relevant case law are unclear with respect to precisely what kind of evidence a city would have to bring to show that very serious consequences would result.¹⁰⁶ While the statute establishes that it is initially the burden of the challenger to show that “no very serious consequences would result” from mining, it is equally clear that a city would have to bring some evidence of very serious consequences in order to defeat a challenger’s claim. Adding to these difficulties and uncertainties is the fact that any potential injury is probably going to be speculative, likely making it more difficult to prove a very serious consequence.

By contrast, the Michigan Supreme Court’s 2010 *Kyser* decision seemed to bolster the argument for municipal autonomy. The Court there declared its distaste for the common law version of the very serious consequences rule and overruled the primary case supporting it—*Silva*. However, a more precise reading of the case shows that the *Kyser* Court’s main contention with the rule was that it was judicially created, that the judiciary has little expertise in land use planning and that the Michigan Constitution vests decisions about the environment and natural resources in the Legislature.¹⁰⁷ According to the Court, the very serious consequences rule “usurps the responsibilities belonging to both the Legislature and to self-governing local communities.”¹⁰⁸ Thus, while at first glance *Kyser* seems to support the idea that the Michigan Supreme Court would be sympathetic to a city’s defense of its zoning powers, *Kyser* also indicates that the Court believed any decisions restricting local zoning power rested with the Legislature. And by adopting the very serious consequences rule, the Legislature has spoken.

pedestrian and traffic safety in the vicinity of the property and along the proposed hauling route serving the property; (e) The impact on other identifiable health, safety, and welfare interests in the local unit of government; (f) The overall public interest in the extraction of the specific natural resources on the property. M.C.L. 125.3205(5). These factors only further strengthen the analogy between this test and hard look review of federal agency decisions described in note 103 *supra*.

¹⁰⁶ See note 103 *supra*.

¹⁰⁷ 786 N.W.2d 543, 556 (Mich. 2010).

¹⁰⁸ *Id.* at 557.

Accordingly, the Court may not be as defensive of local zoning power as the *Kyser* decision might suggest.

Further, the home rule doctrine is also unlikely to substantially aid Michigan cities trying to restrict fracking. The Michigan Constitution gives the Legislature the power to deal with the environment and natural resources, and the Legislature’s enactment of the Natural Resources and Environmental Protection Act, discussed *infra*, clearly demonstrate that gas mining is not an exclusively local issue. As such, any local ordinance would be subject to judicial review. And while the Constitution and home rule statute appear to grant broad authority to local actors, under both the Constitution and statute, that authority is “subject to the constitution and general laws of this state.”¹⁰⁹ Accordingly, even if a fracking ordinance survived heightened judicial scrutiny, the ordinance would still be subject to preemption challenges based on the Michigan Constitution, the NREPA, and the MZEA. For example, if a local fracking ordinance conflicts with a state issued drilling permit or with state regulations, the state may claim that the ordinance is invalid because state authority to regulate mining under the Natural Resources and Environmental Protection Act (“NREPA”) has preempted the ordinance. Accordingly, the NREPA is where a court would look for some indication of the scope of state authority to regulate gas mining. Prior to looking at the provisions of that statute however, a brief history of hydraulic fracturing in Michigan may be helpful.

II. HYDRAULIC FRACTURING IN MICHIGAN AND THE STATE’S AUTHORITY TO REGULATE OIL AND GAS MINING

A. We’ve Been Here Before: A Brief History of Hydraulic Fracturing in Michigan

¹⁰⁹ MICH. CONST. of 1908, art. VIII, § 21 (1908) (emphasis added) (The 1850 Constitution also gave the Legislature the ability to delegate legislative and administrative powers to the counties.). See John A. Fairlie, *Home Rule In Michigan*, 4 AMERICAN POLITICAL SCIENCE REVIEW 119-123 (1910).

Hydraulic fracturing is not a new process for mining gas in Michigan. In fact, gas companies have been hydraulically fracturing in Michigan for approximately 50 years.¹¹⁰ Since the 1960s, more than 12,000 wells have been hydraulically fractured in the State, and it has been heralded as a model for responsible gas and oil production. Importantly, the Michigan Department of Environmental Quality (“MDEQ”) recently asserted it had not documented any cases during those 50 years where fracking has caused adverse impacts to the environment or public health.¹¹¹ Most, if not all, of the drilling during those five decades was into the Antrim Shale, which sits 500 to 2,000 feet below the ground.¹¹²

Now however, in an effort to further develop Michigan’s natural gas potential, the State, and gas operators, have their sites set on drilling into the previously untapped Collingwood-Utica shale, which is approximately 10,000 feet below the surface.¹¹³ As part of that development, a new state house subcommittee was formed to study Michigan’s natural gas industry and the potential for increasing production and growth in the future.¹¹⁴ And from January to June 2011, the State auctioned off 120,000 acres of state land for hydraulic fracturing, and 18 new leases were granted in the Collingwood-Utica shale.¹¹⁵ These developments resulted in the State taking in \$178 million from gas companies during 2011.¹¹⁶ Accordingly, because of the potential to make more money from leases, further develop gas resources and create new jobs, there has been

¹¹⁰ Jay Greene, *Fracking in Michigan Appears on the Upswing*, CRAIN’S DETROIT BUSINESS, May 27, 2011, <http://www.craindetroit.com/article/20110527/STAFFBLOG10/110529913/fracking-in-michigan-appears-on-the-upswing>.

¹¹¹ MDEQ Supervisor of Wells Instruction 1-2011: High Volume Hydraulic Fracturing Well Completions, http://www.michigan.gov/documents/deq/SI_1-2011_353936_7.pdf.

¹¹² Greene, *supra* note 101.

¹¹³ Aaron Levitt, *Michigan Adds New Fracking Regulations*, Benzinga.com (May 26, 2011), <http://www.benzinga.com/etfs/commodities/11/05/1116016/michigan-adds-new-fracking-regulations>; see also, Greene, *supra*, note 100 (quoting Michigan Representative Ken Horn as stating, “The state has immense reserves of natural gas that need to play more of a part in solving Michigan's energy needs.”).

¹¹⁴ Peter Payette, *Legislative Panel To Promote Natural Gas Drilling In Michigan*, Interlochen Public Radio (June 2, 2011), <http://ipr.interlochen.org/ipr-news-features/episode/13940>.

¹¹⁵ Greene, *supra* note 101.

¹¹⁶ Greene, *supra* note 101.

speculation that as much as 500,000 acres of additional land could be made available for gas leases in the coming years.¹¹⁷

Critics of hydraulic fracturing in Michigan are mainly concerned that because the new wells would be much deeper and involve more water, chemicals, and pressure, this could lead to contamination of underground water reservoirs.¹¹⁸ Clearly, reports of water contamination in other states have fueled some of these concerns.¹¹⁹ The MDEQ has recently attempted to address some of these concerns by issuing a new set of “regulations” directed at hydraulic fracturing.¹²⁰ The MDEQ claims it issued the regulations to increase public disclosure and better protect public health and the state’s natural resources.¹²¹ The new instructions became effective on June 22, 2011.¹²²

These regulations are one area where a potential conflict between state and local authority could arise. The regulations themselves suggest that the state has authority to regulate

¹¹⁷ Greene, *supra* note 101.

¹¹⁸ Jay Green *supra* note 101; *Natural Gas Drilling & Water: An Overview of Hydraulic Fracturing for Natural Gas in Northern Michigan*, TIP OF THE MITT WATERSHED COUNCIL, <http://www.watershedcouncil.org/learn/hydraulic-fracturing/>.

¹¹⁹ *Natural Gas Drilling & Water: An Overview of Hydraulic Fracturing for Natural Gas in Northern Michigan*, TIP OF THE MITT WATERSHED COUNCIL, <http://www.watershedcouncil.org/learn/hydraulic-fracturing/> (stating “Incidents of surface and ground water contamination from the fracking process have been reported in other states. In Pennsylvania, state regulators found that gas drilling using high-volume fracking has caused contaminated drinking water, polluted surface waters, polluted air, and contaminated soils.”).

¹²⁰ On May 25, 2011, the MDEQ issued a new set of “regulations” related to the process of fracking in the oil and gas industry in Michigan. See MDEQ Supervisor of Wells Instruction 1-2011: High Volume Hydraulic Fracturing Well Completions, May 2011, http://www.michigan.gov/documents/deq/SI_1-2011_353936_7.pdf. The new regulations were issued as “permitting instructions” and require operators to meet additional requirements for public disclosure and protecting water resources. First, operators are required to conduct a water withdrawal evaluation, provide a supplemental plat of the well site, and provide data and records on: the total volume of water needed for the fracking process, the number of water withdrawal wells, the aquifer type, the depth of withdrawal wells, and the pumping rate and frequency of withdrawal wells. Second, operators have to conduct routine monitoring of any potential impact to freshwater wells, and manage freshwater and flowback water. Third, operators are required to monitor and record surface pressures during fracking operations, but can no longer retain freshwater pits on-site after well completion. Finally, operators are subject to new reporting instructions, including providing a public Material Safety Data Sheet with the name and volume of chemical additives used in fracking fluids, the records of service companies used in the mining and transportation process, pressures recorded during fracturing operations, and the total volume of flowback water produced during fracking.

¹²¹ *Michigan DEQ Announces New Hydraulic Fracturing Regulations*, Michigan Oil & Gas News, May 27, 2011.

¹²² MDEQ Supervisor of Wells Instruction 1-2011: High Volume Hydraulic Fracturing Well Completions, May 2011, http://www.michigan.gov/documents/deq/SI_1-2011_353936_7.pdf.

fracking. Thus, any local fracking regulations inherently conflict with this state authority. The state's authority to issues such regulations, as well as permits related to gas mining, is derived from the Natural Resources and Environmental Protection Act. Thus, where a state regulation conflicts with a local ordinance or where a state issued permit conflicts with a local ordinance, the NREPA would be implicated and the ordinance would be vulnerable to a preemption challenge.

B. The MDEQ's Authority to Regulate Natural Gas Mining

1. NREPA

Oil and Gas exploration, drilling, and operating in Michigan is governed by two main sources. First, the Michigan Constitution establishes that the Legislature shall provide for environmental protection in the interest of public health, safety and welfare.¹²³ Thus, there is a constitutional mandate that the state Legislature provide legislation in the broad area encompassing gas drilling. Second, and more specifically, gas drilling is regulated under the State's Natural Resources and Environmental Protection Act ("NREPA").¹²⁴ The NREPA provides in part that the State's Supervisor of Wells, defined as "the department,"¹²⁵ *i.e.*, the MDEQ has:

[A]uthority over the administration and enforcement of . . . **all matters** relating to the prevention of waste and to the conservation of oil and gas in this state . . . [and] jurisdiction and control of and over **all persons and things** necessary or proper to enforce effectively this part and all matters relating to the prevention of waste and the conservation of oil and gas.¹²⁶

Accordingly, NREPA gives the MDEQ authority over administration and enforcement of "all matters" related to "waste" and "conservation" of natural gas. The term "waste" is defined

¹²³ MICH. CONST. art IV, § 52.

¹²⁴ P.A. 451 of 1994, as amended; M.C.L. 324.61001 et seq. (The statute was originally enacted in 1939 as P.A. 61 of 1939. A search for any legislative history of the Act revealed that when it was adopted it was to "provide for a Supervisor of Wells to regulate business of drilling for oil and gas." 2 Mich. House Journal 1939 at 2143.).

¹²⁵ M.C.L. 324.61501(o).

¹²⁶ M.C.L. 324.61505 (emphasis added).

in the statute,¹²⁷ but the term “conservation” is undefined. Additionally, the statute gives the MDEQ control over “all persons and things necessary or proper” to enforce the statute, “and all matters related to the prevention of waste and the conservation of” natural gas.¹²⁸ The NREPA defines “person” very broadly as “individual, partnership, corporation, association, governmental entity, or other legal entity.”¹²⁹

This appears to be a fairly broad grant of authority to the MDEQ to regulate natural gas mining. In fact, when the Act was originally enacted in 1939, there were concerns that the “Oil Bill [was] too dictatorial” by giving the Supervisor too much power.¹³⁰ But industry representatives at the time backed the measure because it would make Michigan more competitive in oil production.¹³¹ While the statute does not explicitly say that the MDEQ has “exclusive authority” over regulation of gas mining, it clearly makes a very strong argument that the MDEQ has such exclusive authority.

¹²⁷ M.C.L. 324.61501(q) (“Waste” in addition to its ordinary meaning includes all of the following: (i) “Underground waste”, as those words are generally understood in the oil business, and including all of the following: (A) The inefficient, excessive, or improper use or dissipation of the reservoir energy, including gas energy and water drive, of any pool, and the locating, spacing, drilling, equipping, operating, or producing of a well or wells in a manner to reduce or tend to reduce the total quantity of oil or gas ultimately recoverable from any pool. (B) Unreasonable damage to underground fresh or mineral waters, natural brines, or other mineral deposits from operations for the discovery, development, and production and handling of oil or gas. (ii) “Surface waste”, as those words are generally understood in the oil business, and including all of the following: (A) The unnecessary or excessive surface loss or destruction without beneficial use, however caused, of gas, oil, or other product, but including the loss or destruction, without beneficial use, resulting from evaporation, seepage, leakage, or fire, especially a loss or destruction incident to or resulting from the manner of spacing, equipping, operating, or producing a well or wells, or incident to or resulting from inefficient storage or handling of oil. (B) The unnecessary damage to or destruction of the surface; soils; animal, fish, or aquatic life; property; or other environmental values from or by oil and gas operations. (C) The unnecessary endangerment of public health, safety, or welfare from or by oil and gas operations. (D) The drilling of unnecessary wells. (iii) “Market waste”, which includes the production of oil or gas in any field or pool in excess of the market demand as defined in this part.

¹²⁸ M.C.L. 324.61505

¹²⁹ M.C.L. 324.301(h); M.C.L. 324.61501 (the definition of “person” was amended in 1994 to include “governmental entity, or other legal entity.” Prior to 1994, those categories were not included in the definition.)

¹³⁰ *Claims Oil Bill Too Dictatorial*, MARSHALL EVENING CHRONICLE, Feb. 22, 1939.

¹³¹ *Claims Oil Bill Too Dictatorial*, *supra* note 130.

First, with respect to the Legislature's grant of authority to the MDEQ over "all matters" related to waste prevention and gas and oil conservation, the central question in a challenge to zoning would be whether the zoning ordinance prohibiting gas drilling is directly related to waste prevention or gas conservation. Because "conservation" is undefined in the statute, it is not completely clear whether such a zoning ordinance would be directly in conflict with the statute, but the Legislative policy statement in the statute, discussed *infra*, suggests that the zoning ordinance would conflict with the statutory purpose. Second, with respect to the MDEQ's "control of and over all persons and things necessary and proper" for enforcement of matters related to waste and conservation, assuming the zoning ordinance relates to waste and conservation, the MDEQ would have control of or over the municipality (a governmental entity) in its capacity to regulate gas mining. Accordingly, any zoning ordinance may be invalid on the basis that the city's authority to act under some other statute, such as the MZEA, was preempted by the NREPA.

Importantly, the NREPA also contains a Legislative policy declaration regarding gas and oil regulation that helps to define the scope of the statute as well as precisely what the Legislature meant by "waste" and "conservation." The declaration asserts that the State's previous lack of natural resources oversight resulted in the "slaughter and removal" of the State's timber resources, and that the discovery of gas and oil in the state demands more attention so that it is not wasted. Accordingly the Legislature declared, "It is . . . the policy of the state" to not waste gas and oil, but to "**foster the development** of the industry . . . with a view to the **ultimate recovery of the maximum production** of these natural products . . . [and] this part is to be construed liberally to give effect to sound policies of conservation and the prevention of waste

and exploitation.”¹³² This provision is merely a general assertion of policy, but it clearly lends support to the idea that “conservation” includes development of gas resources to the point of “maximum production.” This seems to suggest that unless the ordinance was enacted to prevent “waste,” as defined in the statute, a zoning ordinance prohibiting natural gas mining would directly conflict with the Legislature’s stated intent because the ordinance would be limiting the development of the gas industry and reducing production levels.

The MDEQ’s exclusive authority is further supported by another NREPA provision, which sets forth MDEQ’s powers to promulgate and enforce rules, orders, and instructions that are necessary to carry out the Act,¹³³ and require the suspension of drilling if there is a “threat to public health or safety.”¹³⁴ Again, there is no express exclusivity language in this provision, but the powers it establishes should be read against the background of the statute’s overarching purposes as set forth above.

In sum, MDEQ’s authority under the NREPA to regulate gas mining could potentially be read as exclusive, but the statute is also subject to conflicting interpretations. Thus, a key inquiry here is how broadly Michigan courts have interpreted the Legislature’s grant of authority to MDEQ.

2. *Cases Interpreting the MDEQ’s NREPA Authority*

There have been very few cases interpreting the scope of the Supervisor’s authority under the NREPA in the context of local zoning. The two cases presented below suggest that unless the Legislature has expressly stated that a locality can enact ordinances related to a particular aspect of the mining process, *i.e.*, drilling, transportation, or soil erosion, then the locality would be prohibited from doing so.

¹³² M.C.L. 324.61502 (emphasis added).

¹³³ M.C.L. 324.61506(a).

¹³⁴ M.C.L. 324.61506(q).

Alcona County v Wolverine Environmental Production, Inc.,¹³⁵ presented a conflict between the Supervisor of Wells’ authority under Part 615 of the NREPA,¹³⁶ and the scope of a county’s authority to “administer and enforce” soil erosion regulations under Part 91 of the NREPA.¹³⁷ Alcona County, acting pursuant to its authority under the NREPA to “administer[] and enforce[]” soil erosion rules, adopted an ordinance regarding soil erosion permitting around natural gas mines.¹³⁸ But the County’s ordinance contained substantive language not found in the MDEQ rules by stating in part: “[a]ccess roads to well production sites shall be subject to permit requirements.”¹³⁹ The County filed for injunctive relief and civil fines after Wolverine failed to get permits for its wells in the County.¹⁴⁰ Wolverine defended by stating that under the NREPA, counties only had the authority to enforce state-issued regulations, and if the state did not have a particular regulation, counties had no separate authority for creating additional requirements.¹⁴¹ The trial court concluded that the Legislature did not intend to give the Supervisor exclusive authority over ancillary well activities like soil erosion, and further that the Legislature did not intend to preempt local regulation of such ancillary activities.¹⁴²

The Court of Appeals concluded that the plain language of Part 91 (the soil erosion provision) limited the County’s authority to “administration and enforcement” of regulations and did not give the County authority to promulgate its own regulations.¹⁴³ Additionally, the Court noted that another provision of Part 91 specifically permitted cities, villages, and charter

¹³⁵ 590 N.W.2d 586 (Mich. Ct. App. 1998).

¹³⁶ M.C.L. 324.61501, et seq.

¹³⁷ M.C.L. 324.9101, et seq.

¹³⁸ *Alcona County*, 590 N.W.2d at 588.

¹³⁹ *Id.*

¹⁴⁰ *Id.* at 589.

¹⁴¹ *Id.*

¹⁴² *Id.*

¹⁴³ *Id.* at 592.

townships to enact ordinances to control soil erosion within their boundaries.¹⁴⁴ The Court used the interpretive maxim *expressio unius est exclusio alterius*, to conclude that the Legislature’s express inclusion of regulatory power for these other entities meant that Legislature did not intend counties to have that same power.¹⁴⁵ Finally, the Court recognized that Part 91’s overarching purpose was to have a statewide, uniform system to deal with soil erosion, and therefore, allowing counties to regulate in this way would be contrary to that purpose.¹⁴⁶

Based on this evidence, the Court concluded that the counties did not have authority to implement their own rules regarding soil erosion. The Court further held that the Supervisor had “broad powers over the administration of oil and wells in Part 615,”¹⁴⁷ and its powers to regulate waste from such wells included sediments and erosion related to all parts of the production process.¹⁴⁸ Accordingly, the Supervisor’s authority under Part 615 implicitly limited the County’s authority under Part 91.¹⁴⁹

Similarly, in *Addison Twp. v. Gout*, the Michigan Supreme Court addressed the scope of the Supervisor of Wells’ authority, albeit under a pre-NREPA statute,¹⁵⁰ in the face of a township zoning ordinance that appeared to conflict with that authority.¹⁵¹ Addison Township filed a suit against Mr. Gout after he attempted to construct a gas-processing pipeline outside the gas field that contained his well.¹⁵² The Township asserted that the pipeline violated a local zoning ordinance and special use permit enacted pursuant to the Township Rural Zoning Act,¹⁵³ “which

¹⁴⁴ *Alcona County*, 590 N.W.2d at 592.

¹⁴⁵ *Id.*

¹⁴⁶ *Id.* at 593.

¹⁴⁷ *Id.* at 594.

¹⁴⁸ *Id.* at 594.

¹⁴⁹ *Id.* at 597.

¹⁵⁰ See the Oil, Gas, and Minerals Act, MCL 319.1, et. seq.

¹⁵¹ 460 N.W.2d 215 (Mich. 1990).

¹⁵² *Id.* at 216.

¹⁵³ MCL 125.271, repealed by Public Act 110 of 2006.

gives authority to a municipality to regulate land use.”¹⁵⁴ Accordingly, the Court had to decide whether the jurisdiction of the Supervisor of Wells preempted local zoning under the Act. The Court held that based on the “clear and unambiguous” language of the Zoning Act, the Supervisor had “exclusive jurisdiction to regulate and control the drilling, completion, and operation of ‘oil or gas wells.’”¹⁵⁵ But that this “exclusive jurisdiction of the Supervisor of Wells applies only to oil and gas wells and does not extend to all aspects of the production process.”¹⁵⁶

In drawing this conclusion, the Court stated that it found unpersuasive Gout’s argument that the Legislature intended to vest regulatory control over the entire gas and oil industry with the Supervisor of Wells.¹⁵⁷ As evidence, the Court stated that the Department of Natural Resources (now the MDEQ) conceded that the legislative scheme did not show such broad power.¹⁵⁸ Additionally, in enacting the Township Rural Zoning Act, the Legislature only put a limitation on township “jurisdiction relative to wells,” which the Court interpreted narrowly as only including the well itself and not all other aspects of the production process.¹⁵⁹ Finally, the Court noted that the limitation on zoning of wells in the Township Rural Zoning Act was limited to that Act, and no similar limitation was included in the city or village zoning acts.¹⁶⁰ Specifically, the Court noted that the city and village zoning acts granted municipalities “the authority to regulate land use and structures consistent with the needs of its citizenry regarding energy and other natural resources generally and without limitation.”¹⁶¹

¹⁵⁴ *Addison Twp.*, 460 N.W.2d at 216.

¹⁵⁵ *Id.*

¹⁵⁶ *Id.*

¹⁵⁷ *Id.*

¹⁵⁸ *Id.* at 217.

¹⁵⁹ *Id.*

¹⁶⁰ *Addison Twp.*, 460 N.W.2d at 217.

¹⁶¹ *Id.*

Finally, the Court conducted a preemption analysis and determined that the Legislature had only expressly preempted zoning as to the well itself and not as to other aspects of the production process.¹⁶² Further, the Legislature’s intent did not evidence that it impliedly preempted such zoning. There were no conflicts between the “separate regulatory acts,” and the Legislature’s intent did not show that uniformity of regulation was necessary.¹⁶³ In a footnote, the Court stated, “We appreciate the burdens the industry may face should a township prohibit land use for a processing facility. However, we cannot invade an exercise of legislative discretion.”¹⁶⁴

In *Addison*, the Court dealt with the Township Rural Zoning Act. As discussed *supra*, that statute has since been replaced by the MZEA.¹⁶⁵ And as noted, even the new statute contains the key distinction between townships and cities zoning of gas wells.¹⁶⁶ However, the MZEA also contains the very serious consequences rule related to whether a zoning ordinance “prevent[s]” extraction of natural resources. In theory then, under the *Addison* Court’s rationale, because the statute does not expressly prohibit cities and villages from zoning related to the completion, drilling or operation of gas wells, those entities may still be able to enact zoning on such matters so long as it can be shown that “very serious consequences” would result from the drilling, and the drilling is not “totally” prohibited in the face of a demonstrated need.¹⁶⁷ The

¹⁶² *Id.* The court cited *People v. Llewellyn*, 257 N.W.2d 902 (Mich. 1977) for the basic preemption test in Michigan: “A municipality is precluded from enacting an ordinance if 1) the ordinance is in direct conflict with the state statutory scheme, or 2) if the state statutory scheme pre-empt[s] the ordinance by occupying the field of regulation which the municipality seeks to enter, to the exclusion of the ordinance, even where there is no direct conflict between the two schemes of regulation.”

¹⁶³ *Addison Twp.*, 460 N.W.2d at 217.

¹⁶⁴ *Id.* at 217 n.6.

¹⁶⁵ MCL 125.3101 et seq.

¹⁶⁶ MCL 125.3205(2).

¹⁶⁷ MCL 125.3207 (emphasis added).

statute makes clear that health and safety considerations, *inter alia*, may be part of the court's very serious consequences inquiry.¹⁶⁸

In sum, a local ordinance that survives the kind of heightened judicial scrutiny described in Part I.C.1 and I.C.2. *supra*, is still likely to be struck down under preemption principles if it conflicts with the NREPA or MZEA. While at least one case, *Addison*, appears to support the authority of cities and villages (not townships or counties who are expressly prohibited from such zoning) to zone gas wells, that case was based on an early version of the Township Rural Zoning Act, now consolidated as part of the MZEA.¹⁶⁹ And while the *Addison* Court discussed that the preemption analysis may be different for cities and villages because they were not expressly prohibited from such zoning, the court did not discuss the very serious consequences rule. Further, since *Addison* was a 1990 decision, the Court obviously did not discuss the implications of the 2011 codification of the very serious consequences rule on preemption analysis. Accordingly, a city's power and autonomy to restrict hydraulic fracturing under the MZEA or home rule is likely insufficient to overcome a challenge to those restrictions based on argument that the zoning is preempted by the Michigan Constitution or the NREPA.

CONCLUSION

Hydraulic fracturing is likely to be a hot-button issue in Michigan in the coming years. The potential risks, whether accurate or not, from such mining are already being trumped up in the media and on the internet. Accordingly, it seems likely that concerned communities are going to be looking for ways to prohibit gas development in their areas. For example, they may

¹⁶⁸ A subsequent Court of Appeals decision cited *Addison County* for the proposition that the DNR had "exclusive jurisdiction" to regulate an oil and gas well that had been converted to a brine injection well where a township attempted to regulate the same well.¹⁶⁸ Crucial to the Court's decision was that the Township was expressly prohibited by the TRZA from regulating such a well. *Dart Energy Corp. v. Iosco Twp.*, 520 N.W.2d 652 (Mich. App. 1994).

¹⁶⁹ 460 N.W.2d 215 (Mich. 1990).

try to enact ordinances completely or partially prohibiting hydraulic fracturing. Unfortunately, such local ordinances are very vulnerable to legal challenges by the state, gas operators, or individuals.¹⁷⁰ First, the Legislature's recent amendments to the Michigan Zoning Enabling Act establish a heightened judicial standard of review for zoning that restricts natural resource development. Further, any local zoning related to natural resources that conflicts with state imposed regulations or permitting is vulnerable to a preemption challenge under the Michigan Constitution and NREPA. Finally, Michigan's constitutional and statutory home rule provisions—theoretically giving broad authority to localities—are unlikely to be enough of a legal bulwark for a locality to win a challenge under the MZEA or the NREPA.

¹⁷⁰ Individuals intent on leasing their property to gas operators but prohibited from doing so by a local ordinance may also be able to raise a takings claim. An analysis of such claims is beyond the scope of this article.