

IN THE SUPREME COURT OF OHIO

THE STATE OF OHIO ex rel. JACK MORRISON,
JR., LAW DIRECTOR, CITY OF MUNROE
FALLS, OHIO,

Plaintiff-Appellant

v.

BECK ENERGY CORP., et al.

Defendant-Appellees

Case No. 2013-0465

ON APPEAL FROM THE SUMMIT
COUNTY COURT OF APPEALS,
NINTH APPELLATE DISTRICT,
CASE NO. 25953

**BRIEF OF MUNICIPAL AMICI CURIAE, THE CITIES OF BROADVIEW HEIGHTS,
EUCLID, MANSFIELD, AND NORTH ROYALTON, AND THE VILLAGE OF
AMESVILLE, IN SUPPORT OF APPELLANT**

Jack Morrison, Jr. (0014939)
Thomas M. Saxer (0055962)
Thomas R. Houlihan* (0070067)
**Counsel of Record*
AMER CUNNINGHAM CO., L.P.A.
159 S. Main Street, Suite 1100
Akron, Ohio 44308-1322
Telephone: (330) 762-2411
Facsimile: (330) 762-9918
Houlihan@DAmer-law.com
*Counsel for Plaintiff-Appellant
Munroe Falls*

John K. Keller* (0019957)
**Counsel of Record*
VORYS, SATER, SEYMOUR AND PEASE LLP
52 East Gay Street
P.O. Box 1008
Columbus, Ohio 43216-1008
Telephone: (614) 464-6400
Facsimile: (614) 464-6350
jkkeller@vorys.com
*Counsel for Defendant-Appellees
Beck Energy Corporation and Joseph
Willingham*

Barbara A. Tavaglione (0063617)
9191 Paulding Street NW
Massillon, Ohio 44646
Telephone: (330) 854-0052
bartavaglione@gmail.com
*Counsel for Amicus Curiae People's
Oil and Gas Collaborative - Ohio*

Meleah Geertsma (PHV# 4257-2013)
**Counsel of Record*
(IL Atty. Reg. No. 6298389)
Katherine Sinding (PHV# 4256-2013)
(NY Atty. Reg. No. 2868214)
Peter Precario (0027080)**
***Local Counsel*

Natural Resources Defense Council
20 N. Wacker Dr., Ste. 1600
Chicago, IL 60606-2600
Telephone: (312) 663-9900
Facsimile: (312) 234-9633
mgeertsma@nrdc.org
Counsel for Municipal Amici Curiae

TABLE OF CONTENTS

INTRODUCTION AND IDENTITY AND INTERESTS OF AMICI CURIAE1

STATEMENT OF FACTS2

ARGUMENT.....2

 I. Community Character is of Immense Importance to the Health, Identity, and Economic Viability of Ohio’s Communities2

 II. Hydrofracking Is a Heavy Industrial Process with the Potential to Affect the Community Character and Development Goals of Ohio’s Local Communities5

 A. Hydrofracking is an Industrial Activity6

 B. Hydrofracking Poses Potential Risks to the Character of Ohio’s Diverse Communities.....10

 III. Municipal Zoning Protects Community Character from Conflicting or Inappropriate Uses, Such as Hydrofracking.....15

 A. The Foundations of Zoning Are Rooted In Communities’ Rights to Protect Themselves Against New Industrial Uses15

 B. Ohio Courts Have Recognized the Important Role of Municipal Land Use Decision Making.....17

 IV. The State Oil and Gas Law Fails to Address the Damage that Hydrofracking Will Inflict on the Character and Locally Important Resources of Many Ohio Communities.....19

CONCLUSION.....21

TABLE OF AUTHORITIES

CASES

Belich v. Olmsted Falls,
Eighth District Cuyahoga No. 84537, 84807, 2005-Ohio-19017

Canton v. State,
95 Ohio St. 3d 149, 2002-Ohio-2005, 766 N.E.2d 96317

Downing v. Cook,
69 Ohio St.2d 149, 431 N.E.2d 995 (1982)17

Fondnessy Enterprises, Inc. v. City of Oregon,
23 Ohio St. 3d 213, 492 N.E.2d 797 (1986)18

Franchise Developers, Inc. v. City of Cincinnati,
30 Ohio St.3d 28, 505 N.E.2d 966 (1987) 17-18

Hilton v. City of Toledo,
62 Ohio St.2d 394, 405 N.E.2d 1047 (1980)18

P & S Inv. Co. v. Brown,
40 Ohio App.2d 535, 320 N.E.2d 675 (7th Dist. 1974).....18

Set Products, Inc. v. Bainbridge Twp. Bd. Of Zoning Appeals,
31 Ohio St.3d 260, 510 N.E.2d 373 (1987)18

State v. Buckley,
16 Ohio St.2d 128, 132, 243 N.E.2d 66,70 (1968)18

State ex rel. Morrison v. Beck Energy Corp.,
2013-Ohio-356, 989 N.E.2d 85 (9th District).....1

Vill. Of Euclid, Ohio v. Ambler Realty Co.,
272 U.S. 365, 47 S.Ct. 114, 71 L.Ed. 303 (1926)..... 16-17

CONSTITUTIONS AND STATUTES

R.C. 1509.02passim

R.C. 1509.02120

R.C. 1509.25-1509.2911

R.C. 3734.0519

R.C. 3734.1019

R.C. 3772.2619

REGULATIONS

Ohio Admin. Code 1501: 9-1-049

Ohio Admin. Code 1501: 9-9-0319

OTHER AUTHORITIES

Am. Planning Ass'n, *Community Character: How Arts and Cultural Strategies Create, Reinforce, and Enhance Sense of Place* (2011)..... 2-3

Bradley C. Karkkainen, *Zoning: A Reply to the Critics*, 10 *J. Land Use & Envtl. L.* 45, 64-78 (1994) 4-5

Bruce Finley, *Drilling spills reaching Colorado groundwater; state mulls test rules*, *Denver Post* (Dec. 9, 2012)9

Carolyn E. Cutrona et al., *Neighborhood Characteristics and Depression*, in *Current Directions in Psychological Science* (2006).....4

Donna Jalbert Patalano, Note, *Police Power and the Public Trust: Prescriptive Zoning through the Conflation of Two Ancient Doctrines*, 28 *B.C. Envtl. Aff. L. Rev.* 683 (2001)3

Elisabeth N. Radow, *Homeowners and Gas Drilling Leases: Boon or Bust?*, 83-DEC *N.Y. St. B. J.* 10, 12, 18-21 (2011).....11

Ecology and Environment, Inc., *Economic Assessment Report for the Supplemental Generic Environmental Impact Statement on New York State's Oil, Gas, and Solution Mining Regulatory Program* (2011) 12-13

Edward Bassett, *Zoning* (1922)15

Evans et al., *Community Noise Exposure and Stress in Children*, 109 *J. Accoust. Soc. Am.* 1023 (2001) 4

FracTracker, *Ohio Shale Gas and Oil Viewer*, (Sept. 2012)8

Garance Burke, *Fracking fuels water fights in nation's dry spots*, Associated Press (Jun. 6, 2013)13

Industrial Noise Control, Inc., *Comparative Examples of Noise Levels* (2013).....7

Jim Ladlee & Jeffrey Jacquet, *The Implications of Multi-Well Pads in the Marcellus Shale*, in 43 Cornell University & Penn State Research and Policy Brief Series (2011) 7-8

Lisa M. McKenzie et al., Colo. Sch. of Pub. Health, *Human Health Risk Assessment of Air Emissions from Development of Unconventional Natural Gas Resources* (2012).....6, 10

Lucija Muehlenbachs et al., *The Drill and the Bill: Shale Gas Development and Property Values*, in Canadian Journal of Economics (2012).....11

Mary Esch, *Fracking Poses Mixed Bag for Farmers in New York*, Pittsburgh Post-Gazette (May 21, 2012) 14

Mary Jane Radin, *Residential Rent Control*, 15 Phil. & Pub. Aff. 350 (1986)3

Michelle Bamberger & Robert E. Oswald, *Impacts of Gas Drilling on Human And Animal Health*, in 22 New Solutions 51, 72 (2012)13

Molly Espey & Hilary Lopez, *The Impact of Airport Noise and Proximity on Residential Property Values*, in 31 Growth and Change 408 (2000).4

Nat'l Groundwater Ass'n, *Groundwater Use for Ohio* (2012).....11

Nationwide Ins. Co., *Nationwide statement regarding concerns about hydraulic fracturing* (2012) 11-12

New York City. *Building Zone Resolution* (1916)16

Nick Vieraat, Louis Berger Group, *Technical Comments Summary Report: Expert Team Review of the 2011 Revised Draft SGEIS on the Oil, Gas and Solution Mining Regulatory Program and Proposed High-Volume Hydraulic Fracturing Regulations* (2012).....20

N.Y. State Dep't of Env'tl. Conservation (DEC), *Revised Draft Supplemental Generic Environmental Impact Statement* (2011)*passim*

Organic Trade Ass'n, *2011 Organic Industry Survey* (2011).....14

Pa. Dep't of Env'tl. Protection, Bureau of Oil and Gas Management, *Stray Natural Gas Migration Associated with Oil and Gas Wells* (2009)9

Pa. Land Trust Ass'n, *Marcellus Shale Drillers in Pennsylvania Amass 1614 Violations Since 2008* (2010).....8

Rand McNally, *Ohio Population Density Map* (2013).....10

Rebecca Hammer & Jeanne VanBriesen, NRDC, *In Fracking's Wake* (2012)6

Rebecca Lesser, *New Test Assesses Impact of Gas Drilling, Pipeline Construction on Soil Health*, Cornell Chronicle (Mar. 31, 2010)13

Robert B. Jackson, *Increased stray gas abundance in a subset of drinking water wells near Marcellus shale gas extraction*, 110(28) Procs. of the Nat’l Acad. of Sci. 11250 (2013), available at http://www.eenews.net/assets/2013/06/25/document_ew_01.pdf.....9

Riverkeeper, *Fractured Communities: Case Studies of the Environmental Impacts of Industrial Gas Drilling* (2010)8, 9

StateImpact, *The Pennsylvania Guide to Fracturing, or “Fracking”* (2012)..... 5-6

Stephen G. Osborn, et al., *Methane contamination of drinking water accompanying gas-well drilling and hydraulic fracturing*, 108(20) Procs. of the Nat’l Acad. of Sci. 8172 (2011)9

Theodore Millon & Melvin J. Lerner, *5 Handbook of Psychology: Personality and Social Psychology* 421 (2003)3,4

Timothy W. Kelsey et al., *Marcellus Shale: Land Ownership, Local Voice, and the Distribution of Lease and Royalty Dollars* (2012).....12

Tourism Economics, *The Economic Impact of Tourism in Ohio* (2012).....12

Tse-Chuan Yang & Stephen A. Matthews, *The Role of Social and Built Environments in Predicting Self-Rated Stress: A Multilevel Analysis in Philadelphia*, 803-810, in *16 Health & Place* 803 (2010)4

U.S. Dep’t of Agric., Econ. Research Serv., *Data Sets, Table 4: Certified organic pasture and cropland* (2010)14

U.S. Dep’t of Agric., *Ohio County Estimates, 2009 - 2010 Number of Farms, Average Size of Farm, and Land in Farms* (2010) 13-14

U.S. Dept. of Commerce, *A Standard State Zoning Enabling Act §3* (1926)..... 15-16

U.S. Dep’t of Energy, *Modern Shale Gas Development in the United States: A Primer* (2009)....5

U.S. Env’tl. Protection Agency, *Plan to Study the Potential Impacts of Hydraulic Fracturing on Drinking Water Resources* (2011)7

U.S. Geological Survey, *Landscape Consequences of Natural Gas Extraction in Bradford and Washington Counties, Pennsylvania, 2004–2010* (2012).....10, 11

Wendy Koch, *Wyoming’s smog exceeds Los Angeles’ due to gas drilling*, USA Today’s Green House Blog (Mar. 09, 2011, 11:52 AM).....6

INTRODUCTION AND IDENTITY AND INTERESTS OF AMICI CURIAE

Municipal amici curiae (“Amici”) are a diverse group of municipalities from across the State of Ohio that differ in character, size, location, and prevalent attitudes on the issue of oil and natural gas development.¹ Amici are, however, unified in their conviction that all municipalities are entitled to the fundamental right to make land use determinations to protect community character and development goals. Community character is of primary importance to all municipalities. It can either create the conditions for municipal health, happiness and economic success or, conversely, produce stress and hamper local economic goals. Land use patterns strongly influence community character, particularly in the case of heavy industrial uses—such as hydraulic fracturing, or “hydrofracking”—where improper placement and operations within a community may have powerful negative effects on municipal well-being. Because municipal residents are most familiar with and invested in the character of their community, they are in the best position to make local land use decisions with respect to industrial uses—a fact at the heart of Ohio’s zoning and land use laws.

The opinion of the Ohio Court of Appeals, Ninth District, that certain of Munroe Falls’ local ordinances “are in direct conflict with R.C. § 1509.02 and therefore preempted” by state law, affects the interest of Amici by eliminating traditional municipal zoning authority over a prevalent industrial use. *See State ex rel. Morrison v. Beck Energy Corp.*, 2013-Ohio-356, 989 N.E.2d 85 (9th Dist.). If adhered to, the consequence of this broad reading would be to allow oil and natural gas drilling and associated industrial activities in virtually all areas of all municipalities, risking potential harm to communities’ health, welfare, character, and economic

¹ Amici are the Cities of Broadview Heights, Euclid, Mansfield, and North Royalton, and the Village of Amesville.

prospects.² While Amici have a general interest in the interpretation of state law affecting local authority to address community character issues, the outcome of the present appeal directly implicates Amici's own well-being as Ohio municipalities underlain by oil and gas bearing geologic formations. Because it is imperative for the protection of community character and the general welfare that municipalities be able to exercise their traditional land use authority over industrial activities such as oil and natural gas drilling, Amici urge this Court to reverse the opinion of the Court of Appeals.

STATEMENT OF FACTS

Amici adopt and incorporate by reference the Statement of Facts set forth in the brief of Appellant.

ARGUMENT

I. Community Character is of Immense Importance to the Health, Identity, and Economic Viability of Ohio's Communities.

All Ohioans are influenced by the character of the communities in which they live and vice versa. Often described as a place's "personality," a community's character has consequences for the aggregate health, happiness, identity, and economic well-being of community residents.

Community character is composed of physical inputs (e.g., land use patterns, natural resources, landscape and architectural features, and special historic or natural areas) and human inputs (e.g., demographics, employment mix, local history, and cultural traditions). *See*

² Because R.C. 1509.02 makes no distinction between oil and gas drilling activities based upon well bore direction or drilling method, Appellee's claim that the present appeal "raises no issues related to horizontal shale drilling" is unsupported. Appellee's Memorandum in Opposition to Jurisdiction at 2. Accordingly, this Court's interpretation of R.C. 1509.02, and of Chapter 1509 as a whole, will have broad implications for all manner of oil and gas drilling operations across Ohio—including hydrofracking.

generally American Planning Association, *Community Character: How Arts and Cultural Strategies Create, Reinforce, and Enhance a Sense of Place* (2011).³ The interplay of these elements, as well as the sense of place or “feel” they engender in residents or visitors, creates the community’s character.

Community character is complex. The diverse elements of each community and the manner in which they are experienced by residents or visitors are unique from community to community. For this reason, a community’s character is best understood by those who regularly experience it (including those who carefully study it, such as professional planners), and poorly understood by those with no experience of it.

While the character of a community is impossible to quantify by itself, it has powerful and measurable effects on community identity, health, and economic viability. The sense of one’s community and “home” is “bound-up” with personal identity, as well as personal welfare. Donna Jalbert Patalano, Note, *Police Power and the Public Trust: Prescriptive Zoning through the Conflation of Two Ancient Doctrines*, 28 B.C. Envtl. Aff. L. Rev. 683, 694 (2001) (quoting Mary Jane Radin, *Residential Rent Control*, 15 Phil. & Pub. Aff. 350, 362, 365 (1986)). See also Theodore Millon & Melvin J. Lerner, 5 *Handbook of Psychology: Personality and Social Psychology* 421 (2003) [hereinafter “Psychology Handbook”] (“[Environment] is used to confer meaning, to promote identity, and to locate the person socially, culturally, and economically”). The degree to which residents are satisfied with the community in which they live—especially with regard to characteristics like green space, aesthetics, and degree of noise—has a studied effect on personal satisfaction and psychological well-being. Psychology Handbook at 425.

³ Available at <http://www.planning.org/research/arts/briefingpapers/pdf/character.pdf>.

Correspondingly, where neighborhood character is unsatisfactory or oppressive, it can impair psychological and physical health, as well as behavior. *See id.* at 426; Carolyn E. Cutrona et al., *Neighborhood Characteristics and Depression*, in *Current Directions in Psychological Science* 188 (2006).⁴ Common negative community character elements, such as excess traffic or the presence of hazardous waste sites, have been linked with biological and self-reported stress, as well as depression. *See* Cutrona et al.; Tse-Chuan Yang & Stephen A. Matthews, *The Role of Social and Built Environments in Predicting Self-Rated Stress: A Multilevel Analysis in Philadelphia*, 803-810, in *16 Health & Place* 803 (2010);⁵ Evans et al., *Community Noise Exposure and Stress in Children*, 109 *J. Acoust. Soc. Am.* 1023 (2001) (finding children living in noisier areas of rural communities experienced “modestly elevated psychological stress” and “also report[ed] higher levels of stress symptoms on a standardized scale” than other children living in less noisy areas of those communities).⁶

Community character also has significant economic consequences. On an individual level, negative community character inputs can depress home values, thus hampering what is often a resident’s single largest investment. *See, e.g.*, Molly Espey & Hilary Lopez, *The Impact of Airport Noise and Proximity on Residential Property Values*, in *31 Growth and Change* 408 (2000). These types of changes also diminish personal wealth not expressed in home prices, such as the value existing residents place on the present enjoyment of their surroundings. *See* Bradley C. Karkkainen, *Zoning: A Reply to the Critics*, 10 *J. Land Use & Envtl. L.* 45, 64-78 (1994) (discussing the “consumer surplus” not capitalized in home values) [hereinafter

⁴ Available at <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2186297/>.

⁵ Available at <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3200568/>.

⁶ Available at <https://www.i-med.ac.at/sozialmedizin/documents/evans-et-al.pdf>.

“Karkkainen”].⁷ On a broader scale, local character drives local economic vitality. Character of place is key to attracting investment and commerce. As discussed below, this is particularly relevant for communities dependent on industries based in aesthetics or outside perception, such as tourism or organic agriculture and food production.

II. Hydrofracking Is a Heavy Industrial Process with the Potential to Affect the Community Character and Development Goals of Ohio’s Local Communities.

Oil and natural gas drilling employing hydrofracking is, by its nature, an intense industrial activity. Hydrofracking of shale deposits, like those underlying Ohio, involves a process by which millions of gallons of fresh water are mixed with chemical additives and pumped at high pressure deep underground, where they disturb deposits of methane, salts, and naturally occurring radioactive materials. U.S. Dep’t of Energy, *Modern Shale Gas Development in the United States: A Primer* ES-3 to ES-5 (2009);⁸ N.Y. State Dep’t of Env’tl. Conservation (“DEC”), *Revised Draft Supplemental Generic Environmental Impact Statement* ES-6 to ES-8 (2011) [hereinafter “DSGEIS”];⁹ StateImpact, *The Pennsylvania Guide to*

⁷ This loss of value has personal as well as economic dimensions. As Karkkainen describes, the arrival of an incompatible use may signify that “the neighborhood is taking the first step toward becoming something other than the neighborhood where I chose to live. Although difficult to place in quantitative terms, the loss is great.” Karkkainen at 73.

⁸ Available at http://www.netl.doe.gov/technologies/oil-gas/publications/epreports/shale_gas_primer_2009.pdf.

⁹ The DSGEIS is the New York Department of Environmental Conservation’s review of the potential environmental impacts of New York State’s proposed program for permitting high-volume hydrofracking activities in that state’s portions of the Marcellus and Utica Shale formations. The approximately 1,500 page report includes a detailed explanation of the hydrofracking process as well as many of the environmental effects that would be similar, if not the same, in the development of Ohio’s portion of the Marcellus and Utica Shale formations. Available at <http://www.dec.ny.gov/energy/75370.html>.

Fracturing, or "Fracking", (accessed Sept. 9, 2013).¹⁰ Millions of gallons of wastewater return to the surface and must be stored or transported, and the methane itself must be captured, compressed, and piped across the countryside. Rebecca Hammer & Jeanne VanBriesen, NRDC, *In Fracking's Wake* 10-11 (2012);¹¹ DSGEIS at 5-99 to 5-118 (discussing fluid return); *id.* at 5-14, 5-142 to 5-143 (describing utility corridors, gas gathering and compression). Among the hallmarks of hydrofracking are land clearance, heavy truck traffic, air impacts, and noise.

Widespread hydrofracking of the expansive and gas-rich Marcellus and Utica Shales presents an unprecedented industrialization of Ohio communities, threatening short and long term damage to communities that wish to preserve their character and local resources.

A. Hydrofracking is an Industrial Activity.

Hydrofracking is a heavy industrial activity accompanied by many negative effects. Wellheads, flare stacks and condensate tanks emit smog-forming volatile organic compounds, cancer-causing airborne toxics like benzene, and other air pollutants into the atmosphere. *See* DSGEIS at 6-102 to 6-107, 6-169 to 6-171; Lisa M. McKenzie et al., Colo. Sch. of Pub. Health, *Human Health Risk Assessment of Air Emissions from Development of Unconventional Natural Gas Resources* (2012) (discussing increased cancer as well as chronic and acute non-cancer risks for residents living near hydrofracking operations) [hereinafter "Colorado Air Study"]. *See also* Wendy Koch, *Wyoming's smog exceeds Los Angeles' due to gas drilling*, USA Today's Green House Blog (Mar. 09, 2011, 11:52 AM).¹² High-volume fresh water withdrawals can draw down local water wells and affect the health of surface waterbodies by diminishing stream flows and

¹⁰ Available at <http://stateimpact.npr.org/pennsylvania/tag/fracking/>.

¹¹ Available at <http://www.nrdc.org/energy/files/Fracking-Wastewater-FullReport.pdf>.

¹² Available at <http://content.usatoday.com/communities/greenhouse/post/2011/03/wyomings-smog-exceeds-los-angeles-due-to-gas-drilling/1#.UFEBVo2PWJE>.

concentrating pollution from preexisting sources. See U.S. Env'tl. Protection Agency, *Plan to Study the Potential Impacts of Hydraulic Fracturing on Drinking Water Resources* 27 (2011);¹³ DSGEIS at 6-2 to 6-6. And the thousand plus heavy truck trips—necessary to carry water, heavy machinery, chemicals, and waste required for each drilled well at a well pad—can crowd and damage local roads and may pose a safety hazard to local residents. DSGEIS at 6-301 to 6-303, 6-307 to 6-312, 6-314 to 6-315.

Phases in the hydrofracking process include site preparation, drilling, hydrofracking, wastewater management, and gas recovery – all of which have potential community character impacts. Initial creation of the well requires “four to five weeks of drilling 24 hours per day to complete,” during which operational noise is commonly audible for thousands of feet. *Id.* at 6-289, 6-293 to 6-296. Large drill rigs—about 150 feet high—must be illuminated at night; and during well production, elevated flare stacks burn excess gas above the tree line. *Id.* at 6-274 (noting the “high visibility” of such activities). Actual hydrofracking of the well requires two to five days of up to “20 diesel-pumper trucks operating simultaneously,” generating noise levels of up to 84 decibels—the equivalent of a diesel truck passing by at 40 mph. *Id.* at 6-296; Industrial Noise Control, Inc., *Comparative Examples of Noise Levels*, (accessed Sept. 5, 2013).¹⁴ And each well pad is capable of holding up to twelve individual wells, with each well capable of being hydrofracked multiple times. Jim Ladlee & Jeffrey Jacquet, *The Implications of Multi-Well Pads in the Marcellus Shale*, in 43 Cornell University & Penn State Research and Policy Brief

¹³ Available at http://water.epa.gov/type/groundwater/uic/class2/hydraulicfracturing/upload/hf_study_plan_110_211_final_508.pdf.

¹⁴ Available at <http://www.industrialnoisecontrol.com/comparative-noise-examples.htm>.

Series (2011);¹⁵ DSGEIS at 5-22 to 5-23 (projecting six to eight wells per pad for drilling of Marcellus wells in New York), 5-98 to 5-99 (refracturing). As such, the productive life of a single well pad may bring, cumulatively, over a year's worth of around-the-clock community disturbance. For communities with several wells, this disruption may last for several years. See FracTracker, *Ohio Shale Gas and Oil Viewer*, (Sept. 2012) (map showing large portions of Carroll County covered by areas where wells are permitted within less than a mile of one another).¹⁶

Contamination and safety hazards associated with hydrofracking are also commonplace. While the most nationally visible incidents involve failures of improperly cemented well casings, which can lead to contamination of community drinking water, other episodes at well sites frequently occur. See, e.g., Pa. Land Trust Ass'n, *Marcellus Shale Drillers in Pennsylvania Amass 1614 Violations Since 2008* (2010);¹⁷ Riverkeeper, *Fractured Communities: Case Studies of the Environmental Impacts of Industrial Gas Drilling* (2010) [hereinafter "Fractured Communities"].¹⁸ Such routine incidents include well explosions (termed "blowouts"), soil and groundwater contamination from mismanagement of chemical fracking fluids and wastewater,

¹⁵ The average numbers of wells per pad for Marcellus drilling in Pennsylvania has been increasing since the start of shale drilling. In 2010, the average number of wells per pad was 2.15, and "analysis suggests that in most cases operators are not drilling single wells instead of multi-well pads, as only about 6% of pads with 1, 2, or 3 wells were drilled within 1500 feet of another well pad. The lack of nearby wells may indicate the early stages of a longer term infill strategy." Available at http://cce.cornell.edu/EnergyClimateChange/NaturalGasDev/Documents/PDFs/Policy_Brief_Sept11-draft02.pdf.

¹⁶ Available at: <http://www.fractracker.org/maps/ohio-maps/>.

¹⁷ Available at <http://conserveland.org/violationsrpt>.

¹⁸ Available at <http://www.riverkeeper.org/wp-content/uploads/2010/09/Fractured-Communities-FINAL-September-2010.pdf>.

and explosive levels of gas migrating into private homes. See Pa. Dep't of Env'tl. Protection, Bureau of Oil and Gas Mgmt., *Stray Natural Gas Migration Associated with Oil and Gas Wells* (2009);¹⁹ Bruce Finley, *Drilling spills reaching Colorado groundwater; state mulls test rules*, Denver Post (Dec. 9, 2012) (Denver Post investigation finding that oil and gas companies "contaminated groundwater in 17 percent of the 2,078 spills and slow releases that companies reported to state regulators over the past five years," and that in one county alone, 40 percent of spills reached groundwater);²⁰ Stephen G. Osborn, et al., *Methane contamination of drinking water accompanying gas-well drilling and hydraulic fracturing*, 108(20) *Procs. of the Nat'l Acad. of Sci.* 8172 (2011);²¹ *Fractured Communities* at 6-12, 18-19, 22-24.

For many localities where hydrofracking is allowed indiscriminately, its effects can be felt by the entire community. Because shale deposits are vast and leaseholds are owned by multiple operators, economic incentives encourage extensive and uncoordinated operations. Multiple simultaneous operations compound community character injuries, exacerbating air impacts, truck traffic, and the potential for aquifer contamination.²² Additionally, distribution of well pads throughout a community (approximately four acres each and often requiring the

¹⁹ Available at:

http://www.dep.state.pa.us/dep/subject/advcoun/oil_gas/2009/Stray%20Gas%20Migration%20Cases.pdf.

²⁰ Available at http://www.denverpost.com/ci_22154751/drilling-spills-reaching-colorado-groundwater-state-mulls-test.

²¹ Available at <http://www.nicholas.duke.edu/cgc/pnas2011.pdf>. See also Robert B. Jackson, *Increased stray gas abundance in a subset of drinking water wells near Marcellus shale gas extraction*, 110(28) *Procs. of the Nat'l Acad. of Sci.* 11250 (2013), available at http://www.eenews.net/assets/2013/06/25/document_ew_01.pdf.

²² This is especially a concern in Ohio, where wells targeting the Marcellus and Utica shales, depending on their depth, may be located within as little as 600 to 1000 feet of one another. Ohio Adm. Code 1501: 9-1-04(C)(4)(b), (5)(b).

construction of new roads) contributes to increased soil erosion and the destruction of forestland and/or wildlife habitat—effects compounded by the construction of necessary support infrastructure, such as compressor stations and pipelines. *See generally* U.S. Geological Survey, *Landscape Consequences of Natural Gas Extraction in Bradford and Washington Counties, Pennsylvania, 2004–2010* (2012) [hereinafter “USGS Landscape Report”],²³ DSGEIS at 6-14 to 6-15 (erosion), 6-68 to 6-69, 6-72 to 6-76 (habitat fragmentation).

B. Hydrofracking Poses Potential Risks to the Character of Ohio’s Diverse Communities.

The effects and costs of hydrofracking must be evaluated locally, because they vary with the character and development goals of each community. At the most general level, costs to community character from hydrofracking will be driven by local differences in land use patterns and population density. The closer industrial pollution is to residences, schools and workplaces, the greater the injury. *See, e.g.*, Colorado Air Study (air impacts higher as proximity to wells increases). As such, densely populated municipalities and suburban areas that are primarily residential or commercial in character may simply be incompatible with any hydrofracking activities whatsoever.²⁴

In areas not used to industrial development, damage may also come from a community’s loss of rural identity and desirability as a place to live. *See* Karkkainen at 73 (quoted at fn. 5). Hydrofracking wells, along with new development necessary to support those wells (e.g.,

²³ Available at <http://pubs.usgs.gov/of/2012/1154/of2012-1154.pdf>.

²⁴ Because the Utica and Marcellus shale deposits are located in the eastern part of the state, future drilling may be anticipated in the densely populated areas around Cleveland, Akron, and Youngstown. *See* Rand McNally, *Ohio Population Density Map*, http://education.randmcnally.com/classroom/action/viewLargerMapImage.do?mapFileName=Ohio_Population.png&imageTitle=Ohio%20Population%20Density%20Map&skillLevel=Adv&oid=1073909087 (accessed Sept. 5, 2013).

impoundment pits, pipelines, compressor stations, waste treatment facilities, and natural gas processing plants) can alter the landscape of a formerly rural or forested area. See USGS Landscape Report at 3 (“With the accompanying areas of disturbance, well pads, new roads, and pipelines from [Marcellus Shale and coal bed methane wells], the effect on the landscape is often dramatic”). Many generations of Ohio families have invested their lives, as well as their finances, in rural community life, and simply do not want to live daily with the industrial impacts of hydrofracking activities.

Loss of rural aesthetic not only threatens a way of life, but can also result in tangible economic injury. Industrialization of communities, especially those largely dependent on well water, can lower local property values, thereby diminishing what is often a family’s most valuable asset. Lucija Muehlenbachs et al., *The Drill and the Bill: Shale Gas Development and Property Values*, in *Canadian Journal of Economics* 1 (2012) (finding values of homes reliant on well water and within 2 kilometers of a gas well reduced in value by an average of 24%, even without proof of contamination). This is of particular concern in Ohio where over 700,000 households and nearly two million Ohio residents rely on groundwater wells. See Nat’l Groundwater Ass’n, *Groundwater Use for Ohio* (2012).²⁵ Ohio’s mandatory pooling laws also may be implemented to force non-leasing owners in a community to accept an underground horizontal wellbore on their land, which may decrease salability of the property by impairing the ability to obtain a mortgage. See R.C. 1509.25-1509.29; Elisabeth N. Radow, *Homeowners and Gas Drilling Leases: Boon or Bust?*, 83-DEC N.Y. St. B. J. 10, 12, 18 (2011). The damages from such activity may be uninsurable. See e.g. Nationwide Ins. Co., *Nationwide statement*

²⁵ Available at <http://www.ngwa.org/Documents/States/Use/oh.pdf>. Another 3.38 million Ohio residents rely on public water systems using groundwater, which, in addition to private groundwater well users, accounts for nearly half the state’s population. *Id.*

regarding concerns about hydraulic fracturing (2012) (“Fracking-related losses have never been a covered loss under personal or commercial lines policies. . . . Risks like natural gas and oil drilling are not part of our contracts, and this is common across the industry.”).²⁶

In situations where hydrofracking does decrease the value of neighboring properties, royalty revenues received by leasing landowners will likely not address or compensate the measurable and non-monetizable losses suffered by the rest of community. See Timothy W. Kelsey et al., *Marcellus Shale: Land Ownership, Local Voice, and the Distribution of Lease and Royalty Dollars* (2012) (finding that the top 10% of local landowners and non-resident landowners make the vast majority of Marcellus leasing decisions in Pennsylvania, and that, most often, receive the greatest share of royalties from hydrofracking).²⁷

For more rural towns whose local economy depends on their appealing or bucolic character, community costs (as distinct from impacts to individual property owners) can also be overwhelming. In 2011, visitors in Ohio generated \$26.3 billion in direct and \$13.7 billion in indirect spending, collectively supporting 330,064 direct and 112,936 indirect jobs—or 8.7% of Ohio’s employment. See Tourism Economics, *The Economic Impact of Tourism in Ohio* (2012).²⁸ Tourism is also a growing sector of the economy, with 7.4% growth in spending in 2010 and 6.5% growth in 2011. *Id.* For those communities home to the state’s historic landmarks and rich wildlands, vital revenue streams from tourism and outdoor recreation may be uniquely threatened by the widespread and indiscriminate hydrofracking activities. See e.g. Ecology and Environment, Inc., *Economic Assessment Report for the Supplemental Generic*

²⁶ Available at <http://www.nationwide.com/newsroom/071312-FrackingStatement.jsp>.

²⁷ Available at <http://aese.psu.edu/research/centers/cecd/publications/marcellus/marcellus-shale-land-ownership-local-voice-and-the-distribution-of-lease-and-royalty-dollars/view>.

²⁸ Available at http://mariettaohio.org/documents/072012_econimpact_ohio.pdf.

Environmental Impact Statement on New York State's Oil, Gas, and Solution Mining Regulatory Program 4-58 to 4-59 (2011) (noting potential harm to tourism and agriculture industries).²⁹

Eastern Ohio's world-class lake fishing and wildlife areas may be less appealing to weekend flyfishers and hunters when located next to noisy drill rigs, and a family day out to historic Zoar Village may not be worth enduring the increased truck traffic or smog.

Hydrofracking may also threaten Ohio communities that depend on agriculture.

Competition from drillers can drive up the price of water and deplete local aquifers traditionally used for irrigation. Garance Burke, *Fracking fuels water fights in nation's dry spots*, Associated Press (Jun. 6, 2013).³⁰ And studies have linked hydrofracking and oil and gas infrastructure with negative health impacts on livestock and degradation of soil health. Michelle Bamberger & Robert E. Oswald, *Impacts of Gas Drilling on Human And Animal Health*, in 22 *New Solutions* 51, 51-77, 72 (2012) ("Documentation of cases in six states strongly implicates exposure to gas drilling operations in serious health effects on humans, companion animals, livestock, horses, and wildlife.");³¹ Rebecca Lesser, *New Test Assesses Impact of Gas Drilling, Pipeline Construction on Soil Health*, *Cornell Chronicle* (Mar. 31, 2010) (follow agricultural lands "were found to have marked negative effects from pipeline construction").³² Such potential harms may threaten the over 22,000 farms and 3,000,000 acres of cropland located in Eastern Ohio. U.S.

²⁹ Available at http://www.dec.ny.gov/docs/materials_minerals_pdf/rdsgeisecon0811.pdf.

³⁰ Available at http://www.denverpost.com/business/ci_23472294/fracking-fuels-water-fights-nations-dry-spots.

³¹ Available at http://ecowatch.org/wp-content/uploads/2012/01/Bamberger_Oswald_NS22_in_press.pdf.

³² Available at <http://www.news.cornell.edu/stories/March10/soiltestdrilling.html>.

Dep't of Agric., *Ohio County Estimates, 2009 - 2010 Number of Farms, Average Size of Farm, and Land in Farms* (2010).³³

The specter of hydrofracking can also endanger the market for local exports of goods that rely on the actual or perceived purity of local natural resources, such as specialty food production and organic farming—one of the fastest growing segments of U.S. agriculture. Organic Trade Ass'n, *2011 Organic Industry Survey 5* (2011).³⁴ In Ohio alone, there are nearly 53,000 acres of pasture and cropland dedicated to organics, and more than 400 organic farms, the eleventh highest in the nation. See U.S. Dep't of Agric., Econ. Research Serv., *Data Sets, Table 4: Certified organic pasture and cropland* (2010).³⁵ Outside of Ohio, consumer contamination fears have already driven one major purchaser, the Park Slope Food Cooperative, which buys upward of \$3 million worth of organic farm products each year, to stop buying products from areas with hydrofracking. Mary Esch, *Fracking Poses Mixed Bag for Farmers in New York*, *Pittsburgh Post-Gazette* (May 21, 2012).³⁶ An acceleration of this trend by other purchasers could hamper economic activity in Ohio communities heavily invested in organic farming.

³³ Available at

http://www.nass.usda.gov/Statistics_by_State/Ohio/Publications/County_Estimates/landinfrms10.pdf.

³⁴ Overview available at <http://www.ota.com/pics/documents/2011OrganicIndustrySurvey.pdf>. In Pennsylvania alone, there are over 37,000 acres of pasture and cropland dedicated to organics, and more than 350 organic farms. See U.S. Dep't of Agric, Econ. Research Service, *Table 4: Certified organic pasture and cropland, 2008, by State*, Available at <http://www.ers.usda.gov/Data/Organic/>.

³⁵ Available at <http://www.ers.usda.gov/Data/Organic/>.

³⁶ Available at <http://pipeline.post-gazette.com/news/archives/24545-fracking-poses-mixed-bag-for-farmers-in-new-york>.

Overall, for many Ohio communities, the multi-generational wealth potential of existing economies or property may be more valuable than the temporary gains from hydrofracking accruing to selected residents.

III. Municipal Zoning Protects Community Character from Conflicting or Inappropriate Uses, Such as Hydrofracking.

Municipal zoning is Ohio's principal method for communities to safeguard their character against incompatible and potentially destructive development, such as hydrofracking. Since its origins, zoning has played an important role in the protection and promotion of the health and vibrancy of the state's diverse communities.

A. The Foundations of Zoning Are Rooted In Communities' Rights to Protect Themselves Against New Industrial Uses.

Zoning initially arose to enable communities to protect themselves against the new harms posed by the rapid industrialization and urbanization of the late nineteenth and early twentieth centuries. Harmful spillover effects from new uses, such as skyscrapers and manufacturing facilities, especially in residential neighborhoods, demanded solutions beyond traditional, after-the-fact tort and nuisance remedies. *See generally* Edward Bassett, *Zoning* 316 (1922) [hereinafter "Zoning"]. Factories and livery stables intruded into residential neighborhoods and "bright business streets," sickening residents and driving away customers. *Zoning* at 316. The recognized need for land use controls that would manage development according to the "character of the district and its suitability for particular uses" paved the way for the nation's first highly-publicized, comprehensive zoning ordinance in 1916. U.S. Dept. of Commerce, *A*

Standard State Zoning Enabling Act §3 (1926);³⁷ New York City. *Building Zone Resolution* (1916).³⁸

Indeed, the origins of zoning and protection of community character trace back to Ohio, as the United States Supreme Court recognized the utility of this and other early ordinances in the watershed case *Vill. of Euclid, Ohio v. Ambler Realty Co.* 272 U.S. 365, 47 S.Ct. 114, 71 L.Ed. 303 (1926). In that case, the Court upheld the authority of the then-Village of Euclid—now, *amicus curiae*, the City of Euclid—to enact zoning laws designed to benefit the “public health, safety, morals, and general welfare,” an inquiry heavily dependent on community character. *Id.* at 395. Analogizing to the context-based nature of nuisance law, the Court held that to benefit the public welfare, municipalities may determine incompatible or hurtful uses for exclusion from certain areas “not by . . . abstract consideration . . . but by considering it in connection with the circumstances and the locality.” *Id.* at 388 (famously stating that an excludable “nuisance may be merely a right thing in the wrong place,—like a pig in the parlor instead of the barnyard.”). Under this rubric, the more noxious the use, the greater the discretion a municipality may exercise in excluding it from an area with sensitive community character. Accordingly, the “serious question” in *Euclid* was whether municipalities may exclude less noxious uses, such as apartment buildings and businesses, from lower density residential areas. *Id.* at 390. The court found “no difficulty” in sustaining zoning regulations designed to “divert

³⁷ The quoted language comes from § 3 of the Standard State Zoning Enabling Act, a model act published by the U.S. Department of Commerce that codified many early zoning principles.

³⁸ Available at http://www.nyc.gov/html/dcp/pdf/history_project/1916_zoning_resolution.pdf. The 1916 ordinance famously divided the entire city into three use districts—“residence,” “business,” and “unrestricted”—to separate neighborhoods of a sensitive character from uses with the greatest potential for harm. This purpose allowed some conceptual flexibility. Residence districts enumerated “farming” as a permissible use, but excluded business and industry. *Id.* at § 3. Likewise, “business districts” only completely excluded the most noxious industrial uses, such as “gas . . . manufacture or storage” and “petroleum refining.” *Id.* at § 4(a).

an industrial flow from the course which it would follow.” *Id.* Although zoning law has changed significantly in the nearly 90 years since *Euclid*, the separation of industrial uses from sensitive community areas has always been a central and uncontroversial principal of zoning.

B. Ohio Courts Have Recognized the Important Role of Municipal Land Use Decision Making.

Of those powers granted to municipalities by the Ohio Constitution, Ohio courts have recognized that municipal authority over land use is of central importance. *Canton v. State*, 95 Ohio St. 3d 149, 157, 2002-Ohio-2005, 766 N.E.2d 963, 970, ¶ 38, 39 (state statutory interference with “the ability of political subdivisions to zone their communities as they see fit, strikes at the heart of municipal home rule: the orderly planning of a city.”). As such, municipalities’ zoning and planning decisions are entitled to great respect. *Downing v. Cook*, 69 Ohio St.2d 149, 151, 431 N.E.2d 995, 997 (1982) (because “local authorities are presumed to be familiar with local conditions and . . . the needs of the community,” use of police power is generally justified absent a “demonstrat[ion of] a clear and palpable abuse of that power”); *Belich v. Olmsted Falls*, Eighth District Cuyahoga No. 84537, 84807, 2005-Ohio-190 (“Matters of land use planning are primarily of local concern. Therefore, municipalities have broad discretion in classifying and regulating uses of land.”).

Because the character “of a community relates closely to its citizens' happiness, comfort and general well-being,” Ohio courts have upheld the broad discretion to address community character issues enjoyed by local decision makers with unique understanding of local matters. *Vill. of Hudson v. Albrecht, Inc.*, 9 Ohio St.3d 69, 73, 458 N.E.2d 852, 856-857 (1984) (upholding village zoning ordinance prohibiting new construction at variance with existing development, and creating design standards to achieve aesthetic harmony). *See also Franchise Developers, Inc. v. City of Cincinnati*, 30 Ohio St.3d 28, 33, 505 N.E.2d 966, 971 (1987)

(upholding city overlay zoning scheme for creating environmental quality districts “to preserve and protect the character of certain neighborhoods that the city deems important”); *Hilton v. City of Toledo*, 62 Ohio St.2d 394, 405 N.E.2d 1047 (1980) (upholding provision of the Toledo municipal code prohibiting display of flashing portable advertising signs while allowing display of permanent electric signs).

Deference to municipal expertise is at its greatest when land use regulations regard an activity at “gross variance” with or with the significant potential to injure existing community character. *P & S Inv. Co. v. Brown*, 40 Ohio App.2d 535, 320 N.E.2d 675 (7th Dist. 1974). For example, in *P & S Inv. Co. v. Brown*, the Ohio Court of Appeals, Seventh District, upheld local prohibition of “patently offensive” construction trailers, despite prevailing Ohio law at the time that aesthetic objectives alone could not justify exercise of local police power. *Id.* at 543-44 (citing to *State v. Buckley*, 16 Ohio St. 2d 128, 132, 243 N.E.2d 66, 70 (1968)). Additionally, in *Fondnessy Enterprises, Inc. v. City of Oregon*, this Court—based, in part, on its belief that municipalities have a “compelling need to know, accurately and timely, what hazardous wastes are being disposed of and stored long-term within its city limits”—avoided interpreting state law regulating the permitting of hazardous waste facilities to prohibit application of a city ordinance providing for monitoring such facilities. 23 Ohio St. 3d 213, 215, 492 N.E.2d 797, 799 (1986); see also *Set Products, Inc. v. Bainbridge Twp. Bd. of Zoning Appeals*, 31 Ohio St.3d 260, 265, 510 N.E.2d 373, 378 (1987) (finding state mining law did not preempt conditions in local variance limiting the number of years of operation for a sand and gravel quarry located in a residential district).

IV. The State Oil and Gas Law Fails to Address the Damage that Hydrofracking Will Inflict on the Character and Locally Important Resources of Many Ohio Communities.

Leaving in place the Court of Appeals' broad finding of preemption would allow indiscriminate and communitywide hydrofracking throughout every shale-bearing municipality in Eastern Ohio without regard to the factors that determine community character—resulting in potentially devastating effects on the spirit, health, resources, and economies of many of those communities.

Ohio Revised Code Chapter 1509 (i.e., the Oil and Gas Law) addresses only technical and safety aspects of such operations without explicitly limiting municipal authority; it does not address traditional land use concerns, such as community suitability or the suppression of local nuisances like traffic, noise, and light.³⁹ This framing stands in contrast to other state laws which expressly limit municipal *zoning* authority over potentially noxious uses, while including statutory provisions framed to protect various aspects of community character and well-being. For example, in overriding local zoning, state law governing permitting of hazardous disposal waste sites requires that the Ohio Department of Natural Resources ensure that the siting of such facilities does not constitute a nuisance and also preserves the common law right of municipalities to suppress such nuisances. *See* R.C. 3734.05(A)(7); 3734.10. Likewise, Ohio Revised Code 3772.26 supersedes municipal zoning authority with respect to the siting of certain casinos, but, at minimum, provides that “no casino facility shall be located in a district zoned exclusively residential . . .”. R.C. 3772.26(A). Chapter 1509, however, makes no mention of

³⁹ R.C. 1509(A)(6) does direct the Ohio Department of Natural Resources (“ODNR”) to promulgate noise mitigation rules for oil and gas operations in “urbanized areas,” but not for those in the hundreds Eastern Ohio’s rural communities. R.C. 1509.01(Y) (defining “urbanized area” as municipal corporation or township with a population of 5,000 or more). Even in urbanized areas, state regulations provide no objective standards for noise mitigation. *See* Ohio Admin.Code 1501:9-9-03(I).

zoning, and its only land use based restrictions allow wells as close as 150 feet from an “occupied dwelling” (i.e., a home) or property line—well within the impact radius of potential blowouts or fire hazards. See R.C. 1509.021; Nick Vieraat, Louis Berger Group, *Technical Comments Summary Report: Expert Team Review of the 2011 Revised Draft SGEIS on the Oil, Gas and Solution Mining Regulatory Program and Proposed High-Volume Hydraulic Fracturing Regulations* 5-6 (2012).⁴⁰ Even then, these restrictions apply only to “urbanized areas,” permitting wells within a mere 100 feet of an “occupied private dwelling” in rural communities. R.C. 1509.021.

Were Chapter 1509 read as preempting all traditional land use controls even as it affords no supplementing protections for communities, it is easy to see how Ohio municipalities would be exposed to potentially serious and long-term community damage. Blanket authorization of hydrofracking would allow the conversion of any landscape—including formerly tranquil rural, residential, agricultural, historic, or natural areas—into a *de facto* industrial zone. Residents would be powerless to take even basic protective measures to safeguard their health and property, such as preventing a compressor station or waste storage unit from being placed next door to a home or to the neighborhood elementary school.

Blanket authorization of an injurious industrial activity with no specialized attention to its effects on particular community areas or communities at large does not accord with Ohio’s tradition of municipal home rule and ignores the basic public health foundations of land use law—the separation of people from pollution. Chapter 1509 does not duplicate the important protective function of municipal zoning and would not protect the character of Ohio’s communities from the risks of hydrofracking.

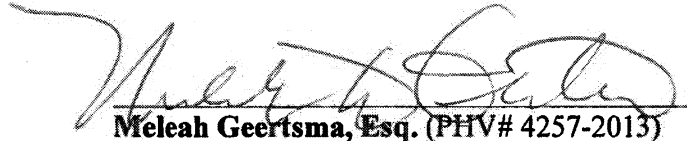
⁴⁰ Available at http://docs.nrdc.org/energy/files/ene_12011201c.pdf.

CONCLUSION

Because it is of central importance to the character, health, and welfare of Ohio's communities that municipalities maintain traditional land use authority over industrial hydrofracking, and for the reasons stated in the brief of Appellant, Amici pray that this Court reverse the decision of the Ohio Court of Appeals, Ninth Appellate District.


Dated: September 5, 2013

Respectfully Submitted,



Meleah Geertsma, Esq. (PHV# 4257-2013)
IL Atty. Reg. No. 6298389

Peter Precario, Esq. (0027080)



Katherine Sinding, Esq. (PHV# 4256-2013)
NY Atty. Reg. No. 2868214