STATE OF NEW YORK

Court of Appeals

APL-2013-00245

NORSE ENERGY CORP. U.S.A., *Appellant*,

VS.

TOWN OF DRYDEN; and TOWN OF DRYDEN TOWN BOARD, *Respondents*.

Appellate Division Case No. 515227. Tompkins County Index No. 2011-0902.

BRIEF OF AMICI CURIAE, THE AMERICAN PLANNING
ASSOCIATION; CATSKILL MOUNTAINKEEPER; DELAWARE
RIVERKEEPER NETWORK; GAS DRILLING AWARENESS FOR
CORTLAND COUNTY; THE NATURAL RESOURCES DEFENSE
COUNCIL, INC.; THE NEW YORK PUBLIC INTEREST RESEARCH
GROUP; OTSEGO 2000, INC.; THE PRESERVATION LEAGUE OF NEW
YORK STATE; RIVERKEEPER, INC.; THEODORE GORDON
FLYFISHERS, INC.; AND VESTAL RESIDENTS FOR SAFE ENERGY IN
SUPPORT OF RESPONDENTS

Dated: April 25, 2014

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CORPORATE DISCLOSURE STATEMENT

Pursuant to Rule 500.1(f) of the Rules of Practice for the Court of Appeals of the State of New York, Proposed Amici Curiae American Planning Association, Catskill Mountainkeeper; Delaware Riverkeeper Network; Gas Drilling Awareness of Cortland County; the Natural Resources Defense Council, Inc.; the New York Public Interest Research Group; Otsego 2000, Inc.; the Preservation League of New York State; Riverkeeper, Inc.; Theodore Gordon Flyfishers, Inc.; and Vestal Residents for Safe Energy(collectively, "Proposed *Amici*"), make the following disclosure: all of incorporated Proposed *Amici* are domestic not-for-profit corporations. They have no parents, subsidiaries, or affiliates.

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IDENTITY AND INTERESTS OF AMICI CURIAE

Amici Curiae are a diverse group of national, statewide, regional, and local not-for-profit and environmental organizations, all of which have a strong connection to New York's local communities and an interest in their health, history, and ecological well-being. Amici's long collective history of involvement in a wide range of community, planning, and environmental issues across the state of New York is detailed in Exhibit A to Katherine Sinding's Affirmation in Support of Motion of Proposed Amici Curiae to File a Brief Amici Curiae in Support of Respondents. Amici Curiae incorporate, by reference, those statements of interest.

PRELIMINARY STATEMENT

At issue in this appeal is whether New York's communities will be stripped of their traditional, constitutionally-rooted zoning and land use powers to protect themselves against the harms of noxious industrial uses.

Shale gas extraction employing the modern techniques of horizontal drilling and high-volume hydraulic fracturing (collectively, "hydrofracking") is one of the highest profile and most controversial issues in New York State, and indeed, the nation. Like many modern approaches for extracting fossil fuels from the earth, hydrofracking is an innately industrial activity with the potential to fundamentally transform the character of any community in which it is permitted. Consistent with

long-standing principles of law concerning local home rule and zoning authority in New York, and as confirmed by the lower courts, the State's municipalities retain the power to decide for themselves whether to accept this inherently industrial activity within their borders.

New York's system for delegating land use authority has long been informed by the principle that residents familiar with and invested in their communities are best situated to decide whether particular industrial uses are compatible with local character and development goals. Further, New Yorkers have relied upon the inherent protections of this system in making fundamental personal and financial decisions, such as where to work, buy a home, or raise a family.

Appellant's reading of § 23-0303 of the New York Oil Gas and Solution Mining Law ("OGSML") to allow indiscriminate placement of heavy industrial operations in incompatible areas across the state is not only contrary to New York's tradition of municipal planning and land use regulation, it also violates residents' longstanding expectations and invites the widespread disruption and pollution of many of the places where New Yorkers live, work, and recreate. *Amici* therefore urge this Court to affirm the decision of the Appellate Division, Third Department at issue in this appeal.

ARGUMENT

I. Hydrofracking Is a Heavy Industrial Process with the Potential to Seriously Impair the Character and Development Goals of New York's Local Communities

Hydrofracking is, by its nature, an intense industrial activity. The hallmarks of hydrofracking are air pollution, intense water usage, toxic wastewater production, visible landscape impairment, persistent heavy truck traffic, and noise. Hydrofracking shale deposits, like those underlying much of New York, 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 gas, corrosive salts, and naturally occurring radioactive materials. *See* U.S. Dep't of Energy, *Modern Shale Gas Development in the United States: A Primer* ES-3 to ES-5 (2009); N.Y. State Dep't of Envtl. Conserv. ("DEC"), *Revised Draft Supplemental Generic Environmental Impact Statement* ES-6 to ES-8 (2011) [hereinafter "DSGEIS"]; The Pennsylvania Guide to

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¹ Available at http://www.rrc.state.tx.us/doeshale/Shale Gas Primer 2009.pdf.

² The DSGEIS is DEC's review of the potential environmental impacts of its proposed program for permitting hydrofracking activities in New York pursuant to the State Environmental Quality Review Act. *Available at* http://www.dec.ny.gov/energy/75370.html.

Hydraulic Fracturing, or "Fracking," StateImpact (last visited Apr. 24, 2014).³ Millions of gallons of toxic wastewater returning to the surface after the pumping ceases must be stored or transported, and the methane itself must be captured, compressed, and piped across the countryside. See Rebecca Hammer & Jeanne VanBriesen, Ph.D., NRDC, In Fracking's Wake 10-11 (2012);⁴ DSGEIS at 5-99 to 5-118 (discussing fluid return); 5-14, 5-142 to 5-143 (describing utility corridors, gas gathering, and compression).

Widespread hydrofracking of the expansive Marcellus and Utica Shales presents an unprecedented prospect of industrializing New York communities, threatening short-and long-term damage to their local character, natural and historic resources, and economic vitality.

A. Hydrofracking is a Heavy Industrial Activity that Can Disturb Communities and May Harm the Health of Local Residents

Hydrofracking is a prototypical industrial activity with broad ranging environmental harms. Well site equipment such as wellheads, flare stacks, diesel engines, and condensate tanks emit smog-forming volatile organic compounds, known carcinogens like benzene, and other air pollutants into the atmosphere. *See* DSGEIS at 6-99 to 6-107, 6-169 to 6-171; U.S. Dep't of Health and Human

³ http://stateimpact.npr.org/pennsylvania/tag/fracking/.

⁴ *Available at* http://www.nrdc.org/energy/files/Fracking-Wastewater-FullReport.pdf.

Services, Health Consultation, Garfield County: Public Health Implications of Ambient Air Exposures to Volatile Organic Compounds as Measured in Rural, Urban, and Oil & Gas Development Areas 1, 13 (2008); Wendy Koch, Wyoming's Smog Exceeds Los Angeles' Due to Gas Drilling, USA Today's Green House Blog (Mar. 09, 2011).⁶ High-volume fresh water withdrawals can diminish stream flows of local waterbodies and concentrate preexisting pollution. See U.S. Envtl. Protection Agency, Plan to Study the Potential Impacts of Hydraulic Fracturing on Drinking Water Resources 27 (2011); DSGEIS at 6-2 to 6-6. Drilling rigs, wastewater impoundments, and other hydrofracking facilities scar the landscape. Id. at 6-263 to 6-288 (visual impacts). And the thousands of heavy truck trips—necessary to carry the water, chemicals, heavy machinery, and waste to and from each hyrofracking job at a well pad—crowd and damage local roads and can lead to an increase in traffic accidents and related injuries and deaths. See id. at 6-301 to 6-303, 6-307 to 6-315; Shmuel Abramzon et al., Estimating The

⁵ *Available at* http://www.atsdr.cdc.gov/hac/pha/Garfield_County_HC_3-13-08/Garfield_County_HC_3-13-08.pdf.

⁶ Available at http://content.usatoday.com/communities/greenhouse/post/2011/03/wyomings-smog-exceeds-los-angeles-due-to-gas-drilling/1#.UFEBVo2PWJE.

⁷ Available at http://water.epa.gov/type/groundwater/uic/class2/hydraulicfracturing/upload/hf_stu dy_plan_110211_final_508.pdf.

Consumptive Use Costs of Shale Natural Gas Extraction on Pennsylvania Roadways, Journal of Infrastructure Systems (Feb. 2014).⁸



A hydrofracking well site in Pennsylvania⁹

Phases in the hydrofracking process include site preparation, drilling, fracturing shale formations (i.e. the high-pressure pumping of the hydrofracking fluid), wastewater management, and gas recovery—all of which are loud, bright, and ugly. Initial creation of the well requires "four to five weeks of drilling at 24

http://repository.cmu.edu/cgi/viewcontent.cgi?article=1065&context=cee. The report estimates that "[f]irst-order costs of additional heavy truck traffic on Pennsylvania state-maintained roadways from Marcellus Shale natural gas development in 2011 were estimated at about \$13,000-\$23,000 per well for all state roadway types." *Id.* at 6.

⁸ Available at

⁹ Photograph by Bob Donnan, *available at* http://www.marcellus-shale.us/MARCELLUS-AIR.htm.

hours per day to complete," during which operational noise is commonly audible for thousands of feet. DSGEIS at 6-274, 6-289, 6-293 to 6-296. Towering drill rigs—about 150 feet high—must be illuminated at night, and during well completion, 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 busy Manhattan street. *Id.* at 6-296; N.Y.C. Dep't of Envtl. Protection, *A Guide to New York City's Noise Code* 2 (2011). ¹⁰

Because a single operational site, known as a "well pad," may be used to drill multiple horizontal wells, and because each well may be re-fractured multiple times, the duration of these jarring activities is "temporal" only in the most relativistic sense. One well pad has the potential to hold up to sixteen individual wells, with six to ten wells predicted for each well pad in New York. DSGEIS at 3-3. As described above, each of these drilled wells at a well pad may generate as

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¹⁰ Available at http://www.nyc.gov/html/dep/pdf/noise_code_guide.pdf.

Appellant Norse Energy claims that hydrofracking is not an industrial activity because it is "a temporal activity that lasts a matter of months and results in surface facilities that are mostly underground with very little traffic or other surface activity or structures" and does not "operate 24 hours per day, 7 days per week, resulting in noise, ongoing traffic, and other surface impacts" Brief of Appellant Norse Energy at 15, n. 2. As demonstrated, however, this is precisely what hydrofracking does.

much as a month-and-a-half of around-the-clock noise and light. *See Id.* at 6-289, 6-296. In addition, re-fracturing work—which is likely in many cases—multiplies these disturbances. *See* Tavassoli et al., *Well Screen and Optimal Time of Refracturing: A Barnett Shale Well*, J. Petroleum Engineering (Apr. 2013) ("[g]asproduction decline in hydraulically fractured wells in shale formations necessitates refracturing");¹² DSGEIS at 5-99 ("if the high-volume hydraulic fracturing procedure is repeated it will entail the same type and duration of surface activity at the well pad as the initial procedure"). Even between drilling and fracturing periods, neighbors may still suffer the effects of heavy trucks, flaring, and gas compression for pipeline transport.

While the disruption from one nearby well pad is great, shale gas well pads rarely exist in isolation, and residents often cope with many such well pads either concurrently or consecutively developed. In a simultaneous development scenario—common in other states because the quick depletion of shale wells requires constant development of new wells to maintain current levels of production—air pollution, noise, and traffic are all magnified. *See* Asjylyn Loder, *U.S. Shale-Oil Boom May Not Last as Fracking Wells Lack Staying Power*,

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¹² Available at http://www.hindawi.com/journals/jpe/2013/817293/.

Bloomberg Businessweek (Oct. 10, 2013). ¹³ Injuries to local natural resources such as soil erosion and the destruction of forestland and wildlife habitat are also compounded. *See* U.S. Geological Survey, *Landscape Consequences of Natural Gas Extraction in Bradford and Washington Counties, Pennsylvania, 2004–2010* 10 (2012) [hereinafter "USGS Landscape Report"] (average well pad and associated infrastructure in Pennsylvania requires "nearly 3.6 hectares (9 acres) per well pad with an additional 8.5 hectares (21 acres) of indirect edge effects" (internal citations omitted)); ¹⁴ DSGEIS at 5-6 (land disturbance), 6-14 to 6-15 (erosion), 6-68 to 6-69, 6-72 to 6-76 (habitat fragmentation). If development, instead, is sequential, the industrial presence of hydrofracking operations may persist in a community for decades.

Apart from the disturbances described above, contamination and safety hazards associated with local hydrofracking activities are also commonplace. *See*,

Available at http://www.businessweek.com/articles/2013-10-10/u-dot-s-dot-shale-oil-boom-may-not-last-as-fracking-wells-lack-staying-power. Production from shale wells "declines by 60 percent to 70 percent in the first year alone" compared with traditional wells, which "take two years to slide 50 percent to 55 percent, and . . . can keep pumping for 20 years or more." *Id.* The need to constantly drill new wells in shale formations to maintain current production levels is known as the Red Queen effect, named after the character of the same name in Lewis Carroll's *Through the Looking Glass*, a sequel to *Alice's Adventures in Wonderland*, who tells Alice, "[i]t takes all the running you can do, to keep in the same place." *Id.*

¹⁴ *Available at* http://pubs.usgs.gov/of/2012/1154/of2012-1154.pdf.

e.g., Pa. Land Trust Ass'n, Marcellus Shale Drillers in Pennsylvania Amass 1614 Violations Since 2008 (2010). The most dramatic incidents include well site explosions, also known as "blowouts," or instances where stray gas has migrated into nearby homes and exploded. See, e.g., Jason Cato, 1 Missing, 1 Hurt in Natural Gas Well Explosion in Greene County, Trib Live (Feb. 11, 2014);¹⁶ Pennsylvania Dep't of Envtl. Protection, Stray Natural Gas Migration Associated with Oil and Gas Wells, 6-8 (2009). 17 More routine, however, are surface accidents, such as spills of fracturing fluid on the well pad; leaks from storage pits, tanks, or pipelines; or inappropriate disposal of toxic wastewater—all of which can contaminate ground and surface water. See, e.g., Bruce Finley, Drilling Spills Reaching Colorado Groundwater; State Mulls Test Rules, The Denver Post (Dec. 9, 2012) ("Oil and gas have contaminated groundwater in 17 percent of the 2,078 spills and slow releases that companies reported to state regulators over the past

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¹⁵ Available at http://conserveland.org/violationsrpt.

¹⁶ *Available at* http://triblive.com/state/pennsylvania/5575457-74/dispatcher-county-emergency#axzz2tF5OS3Ka.

¹⁷ Available at http://www.dep.state.pa.us/dep/subject/advcoun/oil_gas/2009/Stray%20Gas%20Mi gration%20Cases.pdf.

five years, state data show"); ¹⁸ Edward McAllister and Chris Reese, *Exxon Mobil Unit Charged for Pennsylvania Fracking Waste Spill*, Reuters (Sep. 11, 2013) (Pennsylvania Attorney General charging Exxon Mobil for spilling 50,000 gallons of "chemical-laced wastewater from a storage tank and into a local waterway."); ¹⁹ U.S. Geological Survey, *Hydraulic Fracturing Fluids Likely Harmed Threatened Kentucky Fish Species* (Aug. 28, 2013) (spill of fracturing fluid believed to have caused "widespread death" of fish in Kentucky's Acorn Fork River). ²⁰



Hydrofracking truck accident, Wetzel County, WV²¹

¹⁸ *Available at* http://www.denverpost.com/environment/ci_22154751/drilling-spills-reaching-colorado-groundwater-state-mulls-test#ixzz2EihHU2fg.

¹⁹ *Available at* http://www.reuters.com/article/2013/09/11/us-exxon-spill-charges-idUSBRE98A0RJ20130911.

²⁰ Available at http://www.usgs.gov/newsroom/article.asp?ID=3677#.UnzxWfmTgtk.\.

²¹ Photograph by Ed Wade, Jr., courtesy of Wetzel County Action Group, *available at* http://switchboard.nrdc.org/blogs/amall/99.jpg.

Pollution of water supplies may also be caused by poor well construction, which can provide pathways for gas or other contaminants to migrate into aquifers. See, e.g., Open Letter from John Hanger, Sec'y of Pa. Dep't of Envtl. Protection (Oct. 19, 2010) (noting the "overwhelming evidence" that hydrofracking wells caused contamination of water supplies in Dimock, PA);²² Ohio Dep't of Nat. Resources, Report on the Investigation of the Natural Gas Invasion of Aquifers in Bainbridge Township of Geauga County, Ohio, 3, 4 (Sep. 1, 2008) (finding "the decision to proceed with stimulating, or hydraulic fracturing, [a] well without addressing the issue of the minimal cement behind the production casing" to be a contributing factor to gas invasion of a shallow aquifer). These "well integrity" issues are common to all oil and gas drilling, and industry has long accepted such issues as simply a part of the drilling business. Cf. Claudio Brufatto et al., From Mud to Cement—Building Gas Wells, 15 Oilfield Rev. 62, 63 (Sep. 1, 2003) (industry report noting "many of today's wells are at risk" because "[f]ailure to isolate sources of hydrocarbon . . . has resulted in abnormally pressured casing strings and leaks of gas into zones that would otherwise not be gas-bearing"). 23 In

²² Available at http://wbcitizensvoice.com/pdfs/HangerLetter.pdf.

²³ Available at http://www.slb.com/resources/publications/industry_articles/oilfield_review/2003/or2003aut06_building_gas_wells.aspx.

fact, a recent study of operator-wide statistics in Pennsylvania shows that 6-7% of new wells drilled within each of the past three years suffer from compromised structural integrity or outright well-casing failures. Anthony Ingraffea, PhD., P.E., Fluid Migration Mechanisms Due to Faulty Well Design and/or Construction: An Overview and Recent Experiences in the Pennsylvania Marcellus Play, Physicians Scientists & Engineers for Healthy Energy 8 (Jan. 2013) (submitted for peer review); see also Richard J. Davies et al., Oil and Gas Wells and Their Integrity: Implications for Shale and Unconventional Resource Exploitation, Marine and Petroleum Geology 14 (Mar. 2014) ("Well barrier and integrity failure is a reasonably well-documented problem for conventional hydrocarbon extraction and the data we report show that it is an important issue for unconventional gas wells as well."). 25

Concern is also mounting that, even in absence of a well failure or other well site accidents, hydrofracking activities still pose a significant threat to public health. For years, residents in active shale plays have reported developing symptoms like headaches, nosebleeds, or nausea shortly after the commencement

²⁴ Available at

 $http://www.psehealthyenergy.org/data/PSE__Cement_Failure_Causes_and_Rate_Analaysis_Jan_2013_Ingraffea1.pdf.$

²⁵ Available at https://www.dur.ac.uk/resources/refine/Publishedversion.pdf.

of nearby hydrofracking. *See, e.g.*, N. Steinzor et al., *Investigating Links Between Shale Gas Impacts and Health through a Community Survey Project in Pennsylvania*, 23(1) New Solutions 55 (2013) (study finding higher percentage of residents living next to oil and gas well sites reported health symptoms that were similar across project locations, regardless of age group or smoking history, and consistent with exposure to oil and gas contaminants detected in ambient air outside residents' homes).²⁶



A drill rig in Susquehanna, County, PA²⁷

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²⁶ Available at

http://www.earthworksaction.org/files/publications/SteinzorSubraSumiShaleGas HealthImpacts 2013.pdf.

²⁷ Photograph courtesy of the Times Herald-Record, a*vailable at* http://www.recordonline.com/apps/pbcs.dll/article?AID=/20091018/NEWS/91018 0327&Template=photos.

And recent studies have found that living next to hydrofracking wells is correlated with higher rates of birth defects and risk of cancer. See Lisa McKenzie et al., Birth Outcomes and Maternal Residential Proximity to Natural Gas Development in Rural Colorado, Environmental Health Perspectives (Jan. 28, 2014) (finding, inter alia, women who lived close to oil and gas wells had a higher rate of babies born with defects in their hearts than women who lived in areas with no oil and gas wells);²⁸ 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) [hereinafter "CO Air Study"] (discussing increased cancer as well as chronic and acute non-cancer risks for residents living near hydrofracking operations).²⁹ Given the dearth of solid data concerning the potential health consequences of hydrofracking, New York has thus far prevented the practice of hydrofracking until a review of potential health impacts can be completed. See Letter from Nirav Shah, Comm., N.Y. Dep't of Health, to Joe Martens,

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²⁸ *Available at* http://ehp.niehs.nih.gov/wp-content/uploads/122/1/ehp.1306722.pdf.

²⁹ Available at http://cogcc.state.co.us/library/setbackstakeholdergroup/Presentations/Health%20R isk%20Assessment%20of%20Air%20Emissions%20From%20Unconventional%2 0Natural%20Gas%20-%20HMcKenzie2012.pdf.

Commissioner, DEC (Feb. 12, 2013);³⁰ John L. Adgate et al., *Potential Public Health Hazards, Exposures and Health Effects from Unconventional Natural Gas Development*, Envtl. Science & Tech, (Feb. 24, 2014) ("[N]o comprehensive population-based studies of the public health effects of [hydrofracking] operations exist. . . . the current literature suggests that research needs to address these uncertainties before we can reasonably quantify the likelihood of occurrence or magnitude of adverse health effects associated with [hydrofracking] production in workers and communities.").³¹

B. Hydrofracking Has the Potential to Harm the Character and Economic Vitality of New York's Communities, As Well As Local Welfare and Property

While hydrofracking has the potential to cause injury to any of New York's diverse communities, the risk of harm to a community's character, resources, and development goals depends on the particular nature and context of that community. At the most general level, the potential local costs from hydrofracking will be driven by differences in land use patterns and population density because the closer industrial pollution is to residences, workplaces, or sensitive community resources, the greater the injury. *See, e.g.,* CO Air Study (air pollution and associated health risks greater as residential proximity to wells increases). Hydrofracking in

³⁰ Available at http://www.scribd.com/doc/125168825/Shah-Letter-to-Martens.

³¹ Available at http://www.fraw.org.uk/files/extreme/adgate_2014.pdf.

densely-populated areas—such as the metropolitan areas around Buffalo, Syracuse, or Binghamton—or in predominantly residential or commercial areas of smaller municipalities is therefore more likely to cause greater injury to a larger number of people. In absence of local zoning controls, New York law permits the placement of several well pads within less than a mile of one another, so the impact of hydrofracking in some of these neighborhoods may be severe. *See* Cara Lee et al., *An Assessment of the Potential Impacts of High Volume Hydraulic Fracturing* (HVHF) on Forest Resources, The Nature Conservancy, 18-19 (Dec. 19, 2011) (maps of average and high development scenarios in New York).³²

Harms in other municipalities may be less influenced by population density, and more by a municipality's development goals or the nature of the local economy. For example, the economic impacts from incompatible hydrofracking may be overwhelming for New York municipalities whose local economy depends on their appealing or bucolic character. Revenue streams from tourism and outdoor recreation—absolutely vital to the economic livelihood of many of the communities that are home to the state's historic landmarks and rich wildlands—would be particularly threatened by hydrofracking activities. *See* Susan Christopherson, Ph.D., Comments on the 2011 Revised Draft Supplemental Generic Impact Statement regarding the social and economic impacts of natural

³² Available at http://catskillcitizens.org/learnmore/ny-hydrofracking-impacts.pdf.

gas development, 12-14 (Jan. 11, 2012) (noting economic importance of tourism to New York counties in shale regions, evidence of disruption of tourism by hydrofracking in Western states, and potential serious and long-term consequences to tourism from the cumulative impacts of hydrofracking). New York's world-class trout streams and wildlife refuges will be less appealing to weekend birders and flyfishers if located next to noisy drill rigs, and a day trip out to historic Cooperstown may simply not be worth enduring the increased truck traffic and smog. *See Id.* at 14.



Hydrofracking-related truck traffic in Towanda, PA³⁴

³³ *Available at* http://docs.nrdc.org/energy/files/ene_12011201c.pdf at Attachment 5.

³⁴ Photograph by Protecting Our Waters, *available at* http://protectingourwaters.wordpress.com/2011/04/21/stueben-county-new-york-marcellus-shale-na.

Hydrofracking also can threaten the livelihood of communities that depend on agriculture. Studies have linked pollution from hydrofracking and associated infrastructure with health impacts to livestock and degradation of soil. See Michelle Bamberger & Robert E. Oswald, Impacts of Gas Drilling on Human And Animal Health, in 22 New Solutions 51, 72 (2012); 35 Rebecca Lesser, New Test Assesses Impact of Gas Drilling, Pipeline Construction on Soil Health, Chron. Online, Cornell U. (Mar. 31, 2010) (fallow agricultural lands "were found to have marked negative effects from pipeline construction"). 36 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. See Catherine Greene, Growth Patterns in the U.S. Organic Industry, USDA (Oct. 24, 2013).³⁷ In New York State alone, there are over 205,000 acres of pasture and cropland dedicated to organics, and more than 800 organic farms, the third highest in the nation. See U.S. Dep't of Agriculture, Economic Research

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³⁵ Available at http://ecowatch.org/wp-content/uploads/2012/01/Bamberger_Oswald_NS22_in_pr ess.pdf.

³⁶ Available at http://www.news.cornell.edu/stories/March10/soiltestdrilling.html.

³⁷ Available at http://www.ers.usda.gov/amber-waves/2013-october/growth-patterns-in-the-us-organic-industry.aspx#.U11YmPldXz4.

Service, Data Sets, Table 4: Certified organic, producers, pasture, and cropland (2011);³⁸ see also N.Y. State Comptroller, *The Role of Agriculture in the New York State Economy* 1 (Feb. 2010). 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 any areas with hydrofracking activity. Mary Esch, *Fracking Poses Mixed Bag for Farmers in New York*, Pittsburgh Post-Gazette (May 21, 2012). For communities heavily invested in organic farming, an acceleration of this trend would be disastrous.

On a more intimate level, the most significant damage may come from a community's loss of identity and desirability as a place to live. *See* Bradley C. Karkkainen, *Zoning: A Reply to the Critics*, 10 J. Land Use & Envtl. L. 45, 73 (1994) [hereinafter "Karkkainen"]. Hydrofracking wells and associated infrastructure such as drilling rigs, impoundment pits, pipelines, compressor stations, waste treatment facilities, and natural gas processing plants can

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³⁸ Available at http://www.ers.usda.gov/datafiles/Organic_Production/StateLevel_Tables_/PastrCr opbyState.xls.

³⁹ 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.

fundamentally transform the landscape of virtually any non-industrial area—
particularly in tranquil rural or suburban areas. *See* USGS Landscape Report at 3
("[w]ith 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"); *cf.* Renee Lewis, *Texas Jury Awards \$3M to Family for Illnesses Related to Fracking*, Al-Jazeera America (Apr. 23, 2014)
(hydrofracking activities near Decatur, Texas found to be a private nuisance in what may be the first jury verdict in a hydrofracking-related case). ⁴⁰ Many New York families who have chosen to invest their lives, as well as their finances, into living in quiet, residential communities simply do not want to live next door to heavy industrial activities. *Cf.* Karkkainen at 64-78.

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⁴⁰ Available at http://america.aljazeera.com/articles/2014/4/23/texas-fracking-lawsuit.html.



Night flaring from hydrofracking⁴¹

The proximity of shale gas extraction activities to one's home can also translate to tangible economic injury. Industrialization of communities from hydrofracking, especially communities largely dependent on well water, can lower local property values, *See* Lucija Muehlenbachs et al., *The Housing Market Impacts of Shale Gas Development*, Nat'l Bureau of Economics Research Working Paper No. 19796 (Jan. 2014) (finding values of groundwater-dependent homes negatively affected by proximity to hydrofracking wells), ⁴² and damages from oil and gas operations are generally not covered by homeowner insurance policies. *See* Elisabeth N. Radow, *At the Intersection of Wall Street and Main: Impacts of*

⁴¹ Photograph by Bob Donnan, *available at* http://www.donnan.com/Robert-M-Donnan_photography.htm.

⁴² Available at http://public.econ.duke.edu/~timmins/MST_AER_1_3_2014.pdf.

Hydraulic Fracturing on Residential Property Interests, Risk Allocation, and Implications for the Secondary Mortgage Market, 77 Alb. L. Rev. 101, 110-113 (2014) [hereinafter "Radow"]. Even those who refuse to lease their lands could be exposed to development on a neighboring property and, in some cases, forced to accept a horizontal well bore under their own land pursuant to New York's compulsory integration laws. See N.Y. Envtl. Conserv. Law § 23-0901. This is because, unlike migratory oil and gas found in traditional "pools," shale oil and gas remain in-place—trapped in small pores in the shale itself—requiring horizontal drilling and fracturing for extraction. As such, operators are motivated to physically drill into forcibly-integrated mineral parcels in order to extract the maximum amount of oil or gas. The encumbrance of these wellbores, as well as

⁴³ Available at http://catskillcitizens.org/learnmore/77.2.4Radow.pdf.

⁴⁴ Under New York's compulsory integration law, if a drilling operator owns or has leased at least 60% of the mineral rights within a proposed well spacing unit, that operator can obtain an integration order permitting them to drill within the remaining underground portion of the spacing unit, regardless of the wishes of landowners who refuse to lease or sell their mineral rights. N.Y. Envtl. Conserv. Law § 23-0901.

⁴⁵ The fact that nearly all future oil and gas development, to the extent permitted by DEC, would come from non-transitory shale resources is wholly missed by the brief of proposed *Amicus Curiae*, the Independent Oil and Gas Association ("IOGA"), which describes natural gas in its now-rare "conventional" form—a "fugacious fluid which freely traverses real property and municipal boundaries"—as if there were no other type. Proposed Brief of IOGA at 32.

nearby hydrofracking activities, may inhibit the salability of property by impairing the ability of potential buyers to obtain a mortgage loan. *See* Radow at 121-25.

In situations where hydrofracking does decrease the value of neighboring properties, royalty revenues received by leasing landowners will likely not compensate for the measurable and non-monetizable losses suffered by the rest of community. *Cf.* Timothy W. Kelsey et al., *Marcellus Shale: Land Ownership, Local Voice, and the Distribution of Lease and Royalty Dollars*, Penn State Ctr. for Econ. and Cmty. Dev. (2012) (finding that the top 10% of local landowners and non-resident landowners make the vast majority of Marcellus leasing decisions in Pennsylvania, and, most often, receive the greatest share of royalties from hydrofracking). For many New York communities, the multi-generational wealth potential of existing economies or property is more valuable than the temporary gains accruing to a few selected residents.

II. New Yorkers Rely on Municipal Land Use Controls to Protect Communities from Potentially Damaging or Inappropriate Uses, Such as Hydrofracking

Although modern hydrofracking is relatively new, for the past century, the potentially destructive local effects of industrial land uses in New York have been managed by traditional zoning and land use law. Today, municipal exercise of

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

⁴⁶ Available at

land use authority in conjunction with comprehensive planning is the state's principal method for safeguarding the character and vitality of the state's diverse communities against inappropriate development. New Yorkers rely on the longstanding protections of these local laws to ensure that their property and health will not be endangered by the indiscriminate introduction of industrial uses, like hydrofracking, into the places where they work and live.

A. The Foundations of Zoning and Land Use Law Are Rooted in Communities' Rights to Protect Themselves Against New Industrial Uses

Municipal zoning arose in New York nearly 100 years ago to protect state residents who found themselves coping with the problems of an increasingly urban and industrialized world. Early zoning was basic—attempting, in broad strokes, to separate uses with harmful spillover effects, such as livery stables and modern manufacturing facilities, from areas where they would cause the greatest damage. *See* Edward Bassett, Zoning 316 (1922) (discussing the effect of industrial uses: "[t]he factory might occupy an acre, and almost ruin a hundred acres"). For example, the country's first highly publicized comprehensive zoning ordinance in New York City famously divided the entire city into only three use districts—"residence," "business," and "unrestricted." N.Y.C. Bd. of Estimate and

Apportionment, New York City Building Zone Resolution (1916).⁴⁷ Under this scheme, residence districts were the most protected, allowing only farming and residential uses of land. *Id.* at § 3. Business districts, in turn, permitted uses that may have interfered with the quiet enjoyment of residential property, but explicitly excluded the most noxious industrial uses, such as "gas . . . manufacture or storage" and "petroleum refining," which were only allowed in "unrestricted" zones. *Id.* at §§ 4(a), 5.

The United States Supreme Court recognized the utility of New York City's and other early ordinances in the watershed case *Vill. of Euclid, Ohio v. Ambler Realty Co.*, 272 U.S. 365 (1926), when it upheld the authority of the Vill. of Euclid, Ohio to enact zoning laws designed to benefit the "public health, safety, morals, and general welfare." *Id.* at 395. Analogizing to the context-based nature of nuisance law, the Court found that constitutional exercise of land use authority could not be achieved by "abstract consideration" of the utility or harm of a regulated use, "but [only] by considering it in connection with the circumstances and the locality." *Id.* at 387-8. 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

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⁴⁷ Available at

whether municipalities may exclude less noxious uses, such as apartment buildings and businesses, from lower density residential areas. *Id.* at 390. There was "no difficulty" in sustaining zoning regulations designed to "divert an industrial flow from the course which it would follow." *Id.* Although zoning has changed significantly in the last century, the separation of industrial uses from sensitive community areas has always remained a central and uncontroversial principle of land use planning.

B. New Yorkers Have Come to Expect that Local Conditions Will Be Considered in the Land Use Decisions that Intimately Affect Their Lives

Today, basic protections against incompatible and destructive land uses are background principles of New York law. Municipal authority over land use is a constitutionally codified power, see N.Y. Const. art. IX, § 2(c)(ii)(10); N.Y. Mun. Home Rule Law § 10(1)(ii); DJL Rest. Corp. v. City of New York, 96 N.Y.2d 91, 94-95 (2001), and the importance of local land use decisions to "the immediate and long-range protection, enhancement, growth and development of the state and its communities" is recognized by New York's many zoning enabling laws. See N.Y. Gen. City Law § 28-a(2)(a); N.Y. Town Law § 272-a(1)(a); N.Y. Vill. Law § 7-722(1)(a). Municipalities now enjoy authority not only to address patently harmful uses, but also to protect local natural and historic resources, promote aesthetic values, and encourage compatible development that residents desire. See, e.g.,

N.Y. Gen. City Law §§ 27-a, 27-b; N.Y. Town Law §§ 274-a, 274-b; N.Y. Vill. Law §§ 7-725-a, 7-25-b (describing site plan and special use permit approval powers, which allow local officials to ensure that new construction is in harmony with, and protective of, local character); N.Y. Mun. Home Rule Law § 10 (1)(ii)(a)(11) (municipalities may pass laws for the "protection and enhancement of its physical and visual environment"); N.Y. Gen. City Law § 20-f(2), N.Y. Town Law § 261-a(2), and N.Y. Vill. Law § 7-701(2) (purpose of transferrable development rights to "protect the natural, scenic or agricultural qualities of open lands, to enhance sites and areas of special character or special historical, cultural, aesthetic or economic interest"); N.Y. Town Law § 278(2)(b) and N.Y. Vill. Law § 7-738(2)(b) (purpose of cluster development "to preserve the natural and scenic qualities of open lands").

These local land use decisions drive a community's character, which in turn, profoundly affects local life. Satisfaction with one's neighborhood—especially with regard to characteristics like green space, aesthetics, and degree of noise—has a studied effect on personal satisfaction and psychological well-being. Theodore Millon & Melvin J. Lerner, 5 *Handbook of Psychology: Personality and Social Psychology* 421, 425 (2003). Conversely, 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). 48 For example, community nuisances such as excess traffic or the presence of hazardous waste sites, have been linked to 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);⁴⁹ Evans et al., Community Noise Exposure and Stress in Children, 109 J. Accoust. 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). ⁵⁰ Negative community inputs can also depress home values, thus diminishing 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). Such adverse changes also erode intangible personal wealth, such as the value residents place on the quiet enjoyment of their surroundings. See Karkkainen at 64-78. (discussing the "consumer surplus" or personal wealth not

⁴⁸ Available at http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2186297/.

⁴⁹ Available at http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3200568/.

⁵⁰ Available at https://www.i-med.ac.at/sozialmedizin/documents/evans-et-al.pdf.

expressed in home prices, such as the value existing residents place on the present enjoyment of their surroundings). Additionally, as discussed above in the context of hydrofracking, the harmful effects of incompatible uses can damage local economies dependent on aesthetics or outside perception, such as tourism or organic agriculture and food production.

Because community character has significant local impact, municipal control over land use decisions provides residents with valuable democratic input into the decisions intimately affecting their lives and property. Importantly, this framework is also deeply practical. From zoning's beginnings, it has been understood that neighborhood context determines whether a new use will constitute a benefit or a detriment to the community, see Euclid, 272 U.S. at 388 (famously comparing a "nuisance" to a thing "in the wrong place, like a pig in the parlor instead of the barnyard"). Accordingly, New York's land use laws take advantage of local insight by charging municipal leaders—who have the greatest understanding of and investment in their communities—with the responsibility to consider particular local conditions in encouraging the "most appropriate use of land." N.Y. Gen. City Law § 20(25); N.Y. Town Law § 263; N.Y. Vill. Law § 7-704.

Nowhere is this responsibility more visible than in the requirement that all municipalities exercise land use authority in "accordance with a comprehensive

plan." N.Y. Town Law § 263; N.Y. Vill. Law § 7-704 (zoning regulations must reasonably consider "the character of [each] district, [and] its peculiar suitability for particular uses"); see also N.Y. Gen. City Law § 20(25). ⁵¹ Plans can be either formal or informal. Formal plans are often complex documents, which meticulously detail the "great diversity" of existing community resources and outline land use goals. See N.Y. Gen. City Law § 28-a(2)(d), (4); N.Y. Town Law § 272-a(1)(d), (3); N.Y. Vill. Law § 7-722(1)(d), (3) (formal plans should consider, inter alia, regional needs; existing intensity and location of land uses; historic, cultural, and environmental resources; location of health and educational facilities; and sensitive environmental areas). See, e.g., George R. Frantz and Assocs, Town of Dryden Comprehensive Plan (2005). A composite of local studies and reports, public hearings, the zoning map, and the zoning ordinance itself can also constitute an informal plan, provided "careful and deliberate" consideration has been given to the composition and development needs of the community. Udell v. Haas, 21 N.Y.2d 463, 470-72 (1968); see also Thomas v. Town of Bedford, 11 N.Y.2d 428, 434-35 (1962). See, e.g., Town of Middlefield, Master Plan for the Township of

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⁵¹ The General City Law states that such laws be made "in accord with a well considered plan." *Id.*

⁵² Available at http://dryden.ny.us/Downloads/CompPlanFull.pdf.

Middlefield (1989) (updated Jun. 14, 2011);⁵³ Town of Middlefield, Zoning Law (2011). Whether formal or informal, comprehensive planning creates a rational scheme for development that is both attentive to community realities as well as community goals.

Once a plan is established, New York law constrains municipalities in their ability to make imprudent, ad-hoc zoning changes that would injure community character and long term development goals. For example, while all municipalities are empowered to grant variances from the application of local zoning law to a particular property, N.Y. Gen. City Law §§ 81(1), 81-b; N.Y. Town Law §§ 267(2), 267-a; N.Y. Vill. Law §§ 7-712(2), 7-712-b, no use variance granted may "alter the essential character of the neighborhood," which must be preserved. N.Y. Gen City Law § 81-b(3)(b)(iii); N.Y. Town Law § 267-b(2), (3); N.Y. Vill. Law § 7-712-b(2), (3). Similarly, other municipal zoning tools reinforce adherence to comprehensive planning principles. See, e.g., N.Y. Gen. City Law § 33; N.Y. Town Law § 277; N.Y. Vill. Law § 7-730 (planning board approving subdivision plat must ensure proposed streets and highways conform to comprehensive plan); N.Y. Town Law § 261-b(2) and N.Y. Vill. Law § 7-703(2) (purpose of incentive

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⁵³ Available at Cooperstown Holstein Corp. v. Town of Middlefield (No. 515498) Record on Appeal at 140-197.

zoning "to advance the town's specific physical, cultural and social policies in accordance with the town's comprehensive plan").

Even at the state level, where the Legislature specifically expresses an intent to preempt municipal zoning, it "creates alternative mechanisms to ensure State consideration of local interests" and comprehensive planning. See Brief of Respondents Town of Dryden and Town of Dryden Town Board ("Dryden Respondents") at 36-39. This cautious state exercise of land use authority is consistent with longstanding constitutional precedent tying the limits of that authority to the character of the locality in which it is exercised. See Euclid, 272 U.S. at 388 (power to control construction of a particular use within a particular area is dependent upon the context of that area); Gernatt Asphalt Products, Inc. v. Town of Sardinia, 87 N.Y.2d 668, 683 (1996) (in the context of an exclusionary zoning challenge, Court upheld local ban on mining, noting zoning ordinances "must consider regional needs and requirements" rather than exclusionary motives); see also Robinson Twp., Washington Cnty. v. Com., 284 M.D. 2012, 33 (Pa. Commw. Ct. Apr. 20, 2012) (striking down a mandatory statewide zoning scheme for oil and gas activities under the Pennsylvania Oil and Gas Act because by "requiring municipalities to violate their comprehensive plans for growth and development, [the act] violate[d] substantive due process").

While not all municipalities exercise zoning authority, the expectation that exercise of land use authority, whether at the state or local level, will reasonably account for compatibility with local circumstances has long informed New Yorkers' fundamental personal and financial decisions—such as where to buy a home, raise a family, or start a business. ⁵⁴ Although New York's system of zoning and land use law does not entitle residents or landowners to static communities, at a bare minimum, it ensures that plainly noxious and potentially harmful uses, such as industrial hydrofracking, will not be allowed indiscriminately and without due consideration for community character.

III. Neither the OGSML nor State Environmental Quality Review Law Adequately Evaluate or Address the Impacts of Hydrofracking on the Character and Locally Important Resources of New York Communities

Neither the OGSML, which regulates technical aspects of oil and gas production, nor the State Environmental Quality Review Act ("SEQRA"), duplicate or supplant the need for the locally-focused and protective function of municipal comprehensive planning and land use legislation. These state laws lack mechanisms by which to evaluate and address local concerns, which extend beyond minimum well-site safety standards or significant statewide environmental

⁵⁴ Even in situations where municipalities do not exercise zoning authority, they still are able to enact land use laws designed to protect local residents from potential hazards. *See Pete Drown Inc. v. Town Bd. of Town of Ellenburg*, 188 A.D.2d 850, 852 (3d Dep't 1992) (upholding ban on construction of waste incinerators despite fact that municipality did not have zoning law at the time).

impacts. Appellant's interpretation of these laws as superseding all protective local land use controls is therefore—beyond being wrong as a matter of law—a dangerous one. This misinterpretation has potential detrimental consequences for the character, resources, and economies of many New York communities as well as the personal and economic expectations of local residents and landowners.

A. The OGSML Provides No Structure for Consideration of Surrounding Uses and Will Not Protect New York's Communities from Hydrofracking's Potential Harms

The OGSML provides no mechanism by which to consider community character, contains no provisions which address land use concerns, and as such, cannot protect the character and locally important resources of New York's communities from the potentially deleterious impacts of hydrofracking.

As the lower courts have recognized, the OGSML addresses only "technical operational concerns. . . . [n]one of the provisions . . . address traditional land use concerns, such as traffic, noise or industry suitability for a particular community or neighborhood," *Anschutz Exploration Corp. v. Town of Dryden*, 35 Misc. 3d 450, 465 (Sup. Ct., Tompkins County 2012); *see also Norse Energy Corp. USA v. Town of Dryden*, 108 A.D.3d 25, 34-35 (3d Dep't 2013), a fact evident from the statutory text of the OGSML and its implementing regulations. For example, while applicants for permits and spacing orders must submit information on subsurface characteristics like "the nature and character of the stratum containing the [target]

pool," there are no necessary submissions related to the character or use of the overlying land. See N.Y. Envtl. Conserv. Law §§ 23-0501(2), 23-0503; 6 N.Y. Comp. Codes R. & Regs. ("NYCRR") §§ 552.1, 553.3(c). Further, the only setback related to any surface feature—such as a home, school, hospital, or sensitive agricultural area—comes from regulation and permits oil and gas wells as close as 100 feet from any "inhabited structure" or 150 feet from a "public building," 6 NYCRR § 553.2—an insufficient distance to protect a local homeowner from the blast radius of a typical hydrofracking well blowout. See, e.g., supra Cato, 1 Missing, 1 Hurt in Natural Gas Well Explosion in Greene County (describing a hydrofracking well blowout that shot "flames several stories into the air and preventing authorities from getting closer than 300 yards because of the blistering heat"). 55 DEC's proposed, but never finalized, regulations for hydrofracking would have provided improved application and setback requirements regarding inhabited structures and water resources, see Proposed 6 NYCRR §§ 560.3; 560.4, ⁵⁶ but such minimum safety precautions fall well short of the practical and particularized land use concerns commonly addressed by

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⁵⁵ *Available at* http://triblive.com/state/pennsylvania/5575457-74/dispatcher-county-emergency#axzz2tF5OS3Ka.

⁵⁶ Available at http://www.dec.ny.gov/regulations/87420.html.

municipal zoning and comprehensive planning.⁵⁷ Proposed minimum setback distances, for example, would not exclude industrial hydrofracking activities from clearly incompatible community areas like residential neighborhoods, sensitive agricultural or natural lands, or places of historic significance. *See Id.*

Because the OGSML virtually ignores all zoning and land use related issues, Appellant's reading of the act as fully preemptive of local authority envisions blanket authorization of a major industrial activity in all shale-bearing New York communities—including presently tranquil rural, residential, agricultural, historic, or natural areas. While such a land use regime would be unprecedented in New York, a similar statewide land use scheme was attempted in Pennsylvania and recently declared unconstitutional by that state's high court. *See Robinson Twp.*, *Washington Cnty. v. Com.*, 83 A.3d 901 (Pa. 2013). There, the Pennsylvania legislature had amended the language in the state's Oil and Gas Act regarding preemption of local ordinances to explicitly target municipal zoning, thereby creating what amounted to a statewide land use ordinance with respect to oil and gas drilling. *See generally* 58 Pa. C.S. §§ 3301-3309 (2012). This revised state

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⁵⁷For example, while Proposed 6 NYCRR § 560.3(e) allows for public comment on permits regarding local concerns, DEC is not required to consider such concerns unless raised in comment, and even when raised, the agency is not required to address them. Further, DEC is unlikely to have the same understanding or appreciation of the severity of local impacts brought to its attention as would locally elected community leaders.

land use scheme required oil and gas operations to be allowed as-of-right in all zones—leaving municipalities practically no authority to provide additional land-use-based protections. In holding this "unprecedented" disruption of "prior planning, and derivative expectations" unconstitutional, *Robinson*, 83 A.3d at 111, the Pennsylvania Supreme Court relied on a unique provision of the Pennsylvania Constitution,⁵⁸ but the Court's findings on the practical effects of the state's attempted land use plan are relevant here. Specifically, the Court found that:

[the amended Oil and Gas Act] compels exposure of otherwise protected areas to environmental and habitability costs associated with this particular industrial use: air, water, and soil pollution; persistent noise, lighting, and heavy vehicle traffic; and the building of facilities incongruous with the surrounding landscape. The entirely new legal regimen alters existing expectations of communities and property owners and substantially diminishes natural and esthetic values of the local environment, which contribute significantly to a quality of environmental life in Pennsylvania. Again, protected by their organic charter, these communities and property owners could reasonably rely upon the zoning schemes that municipalities designed at the General Assembly's prompt For communities and property owners affected by [the act], however, the General Assembly has effectively disposed of the regulatory structures upon which citizens and communities made significant financial and quality of life decisions, and has sanctioned a direct and harmful degradation of the environmental quality of life in these communities and zoning districts.

⁵⁸ The Court relied primarily on the Pennsylvania Environmental Rights Amendment in rendering its opinion, which provides "The people have a right to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment. Pennsylvania's public natural resources are the common property of all the people, including generations yet to come. As trustee of these resources, the Commonwealth shall conserve and maintain them for the benefit of all the people." Pa. Const., Art. I, § 27.

Id. at 979.

Appellant's reading of the OGSML invites all operational aspects of hydrofracking—wells, drill rigs, pipelines, waste pits, condensate tanks, and compressor stations—into every shale-bearing New York community, putting those communities and the longstanding expectations of their residents in harm's way. Whether New York legislators could attempt, as Pennsylvania did, the unprecedented displacement of the work of thousands of democratically elected local representatives in the creation of a "statewide zoning ordinance," the sparse text of the OGSML does not demonstrate an intent to cause such a dramatic result. See generally Brief of Dryden Respondents at 40-46. Amici therefore urge this Court to affirm a reading of the OGSML that preserves New York's tradition of municipal land use authority, the reasonable expectations of New York residents, and the health and continued vitality of New York's communities.

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⁵⁹ Indeed, without further statutory or regulatory changes, the OGSML provides even fewer protections than the draconian provisions of the Pennsylvania Oil and Gas Act that were declared unconstitutional. *Compare* 6 NYCRR § 553.2 (prohibiting wells within 100 feet of an "inhabited structure" and 150 feet from a "public building") *with* 58 Pa. C.S. § 3215(a) (generally prohibiting wells from being drilled within 500 feet of an existing building) *and* 58 Pa. C.S. § 3304(5.1)(ii) (prohibiting wells from being drilled within 300 feet of an existing building in a residential zone).

B. The Generic, Statewide Review of Hydrofracking under SEQRA Does Not Duplicate Careful and Particularized Land Use Planning by Municipalities

Importantly, and contrary to the claims of Appellant Norse Energy, "community character concerns" addressed by municipal exercise of land use authority are not being "fully evaluated" under SEQRA. See Reply Brief of Appellant Norse Energy at 33-34. As New York courts have noted, local concerns related to development goals and the preservation of individual neighborhood character extend beyond SEQRA's focus on potentially significant environmental impacts. See Wal-Mart Stores, Inc. v. Planning Bd. of Town of N. Elba, 238 A.D.2d 93, 97 (3d Dep't 1998) (municipality "entitled to consider factors outside the scope of the environmental review mandated by SEQRA [when considering whether to grant conditional use permit], insofar as they bear on matters legitimately within the purview of the [Town Land Use Code]."); cf. Schadow v. Wilson, 191 A.D.2d 53, 56-59 (3d Dep't 1993) (upholding a denial of a proposed mine on community character grounds, despite a DEC finding that the project would have no significant noise, dust erosion, traffic, or visual impacts).

Furthermore, it is hard to imagine how the state's current generic review of the environmental impacts of hydrofracking on a statewide level will assess the local impact of hydrofracking in any particular place. The DSGEIS admits as much—stating that while "[b]oth short-term and long-term" community character

impacts are possible with implications for "the economic, demographic, and social characteristics of the affected communities," DEC has no intention of evaluating them in a meaningful way:

the determination of whether [community character] impacts are positive or negative cannot be made. Change would occur in the affected communities, but how this change is viewed is subjective and would vary from individual to individual. This section [on community character], therefore, . . . does not attempt to make a judgment on whether such change is beneficial or harmful to the local community character.

DSGEIS at 6-317.⁶⁰ Here, DEC admits the obvious—that while a town board may not have expertise in the technical aspects of well drilling, a group of environmental regulators in Albany, or their hired consultants, have no expertise in local matters or the democratic preferences of residents. As such, the impact that a major industrial use will have on community character, as well as the appropriate

⁶⁰ Additionally, while the DSGEIS notes that, under certain circumstances, site-specific environmental review may be necessary, the only examples it provides of when such review would be required relate not to land use, but to water resource concerns—mostly, those cases in which waiver of a protective setback is being considered. *See* DSGEIS 3-15 to 3-16. Reluctance to perform additional site-specific environmental review based upon local land use concerns is further evidenced by DEC's proposal to issue guidance regarding the permitting of hydrofracking in state-certified agricultural districts. Although the findings statement for DEC's earlier generic EIS applicable to all oil and gas drilling in New York—the 1992 Generic Environmental Impact Statement on the Oil, Gas, and Solution Mining Regulatory Program—requires site-specific review for activities disturbing more than 2.5 acres in these agricultural districts, the DSGEIS implies that such review would not be necessary with hydrofracking activities provided the generic requirements of the yet-to-be-drafted guidance are followed. *See Id.* at 3-16 to 3-17.

land use measure to address that impact, are things that have been traditionally—and under both SEQRA and the OGSML—left to the discretion of local decision makers.

CONCLUSION

For the reasons stated above, and in the brief of Respondents, *Amici* pray that this Court affirm the decision of the Appellate Division, Third Department that the OGSML does not preempt the traditional and long-valued land use authority of New York's diverse municipalities.

Dated: April 25, 2014 New York, NY

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