The New York Environmental Lawyer

A publication of the Environmental Law Section of the New York State Bar Association

Message from the Outgoing Chair

It is hard to believe that my term as Chair of the Environmental Law Section is over. Please join me in welcoming Carl Howard as the new Chair. Over the past year, the Section was involved in a variety of activities. Each one seemed to follow close on the heels of the last. It would not have been possible to have pulled them off without the efforts of Section members and NYSBA staff.



Philip H. Dixon

October 2011 saw a successful Fall Meeting, held in Saratoga Springs as a joint meeting with the Municipal Law Section. The program drew more than 135 regis-

Message from the Incoming Chair

It is an honor and privilege to be the thirty-second Chair of this great Section. Thank you Phil Dixon for a smooth and instructive year (2011-2012) and thank you Arthur Savage, who got us started so well back in 1981. In fact, in my four years as an officer I have had the pleasure to work with truly outstanding Chairs; namely, Joan Leary Matthews, Alan Knauf, Barry Kogut and Phil. That is an all-star lineup. I am delighted to



Carl Howard

say that the officers who will serve with me, Kevin Reilly as Vice-Chair, Terresa Bakner as Treasurer, and Michael Lesser as Secretary, are all wonderfully dedicated to

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trants. The Section's Program Co-Chairs, Ginny Robbins and Kevin Ryan, did a wonderful job coming up with exciting topics and speakers. The Section's dinner speaker on Saturday night was Michael Relyea, head of the Luther Forest Technology Campus, where Global Foundries is constructing a large chip-fab plant. The Saturday CLE program offered an update on SEQRA, an overview of new State ethics rules, and a review of recent developments in Marcellus Shale gas, green buildings and land use. On Sunday morning, there was a CLE program introducing the new endangered species regulations.

The Annual Meeting in New York City in January 2012 was also well-attended and Carl Howard and Mike Lesser did an admirable job as program co-chairs. DEC Commissioner Joe Martens was our luncheon speaker. As part of the Section's efforts over the past several years to attract younger attorneys to Section activities, the CLE programs for both the Fall Meeting and Annual Meeting were designed to provide significant overlapping credit to both newly admitted and experienced attorneys. The Friday morning CLE program included presentations on Marcellus Shale, Brownfields, climate change and ethics.

At the 2012 Annual Meeting the Section gave its annual Section award posthumously to Constantine Sidamon-Eristoff, who was a friend and mentor to many in the Section over the years, and who passed away last December. The Section also volunteered to take part in implementing an environmental award program in the Republic of Georgia, Connie's ancestral home, in his name. Also recognized at the Annual Meeting was the Section's Brownfields Task Force, ably and energetically chaired by Dave Freeman and Larry Schnapf. The Task Force, which developed a detailed report suggesting a number of changes to improve the effectiveness of the State's Brownfield Cleanup Program, was awarded the annual Section Council Award for its contributions. Continuing a trend begun by my predecessor, Barry Kogut, the Section held its annual business meeting and reception on Thursday night, immediately after the EPA update program, rather than during the Friday luncheon. This change appears to have worked well, and resulted in a less frenetic atmosphere at the Friday luncheon.

The Section's annual Legislative Forum in May 2012 was also a success, with Legislation Committee Co-Chairs Jeff Brown, Mike Lesser, Andrew Wilson and John Parker arranging a program covering topics including environmental enforcement, legislative initiatives and budget impacts. We were also pleased to have as our luncheon

speaker Robert Hallman, Deputy Secretary to the Governor for Energy and the Environment, who shared with us an overview of his office and important issues confronting the State. The Section also undertook other programs in 2012, such as the annual petroleum spills symposium.

In addition to our programs, the Section took part in the "Diversity Challenge" initiated by then-NYSBA President Vince Doyle. We designated the Co-Chairs of the Section's Membership Committee, Rob Stout and Jason Kaplan, as co-coordinators of our Section's response to the Initiative, which was honored as one of ten first-place "Diversity Champions." The Section's commitment goes back two decades, when the Section began co-sponsoring a fellowship program for minority law students to spend summers working for government agencies or public interest organizations. At the 2012 Annual Meeting, we awarded two such fellowships for the summer of 2012, to Rosemary "Rosie" Ortiona of Hofstra Law School and Sanjeevani "Sunny" Joshi of Albany Law School. Rosie worked at EPA, Region II, and Sunny worked at DEC in Albany over the summer. As part of its continuing efforts, we also designated two former Section Chairs—Joan Leary Matthews and John Greenthal—to participate in the monthly Section Cabinet conference calls as diversity advisors to help ensure that the Section's efforts in setting up programs or policies maximized our efforts to achieve diversity.

With respect to our Section, it is also important to foster diversity of interests and to bolster active participation in Section activities by attorneys for government agencies and public interest organizations. In this regard, over the past several years various ethical guidelines and restrictions have been imposed on State employees that make their participation in Section events more difficult. It will be a continuing effort to bring more rationality to this issue.

All of these activities could not have been carried off without the hard work of the various program co-chairs and the wonderful Section Cabinet that I had the pleasure to work with over my term: Carl Howard, Treasurer Kevin Reilly, Secretary Terresa Bakner, Section Delegate to the House of Delegates Howard Tollin, Section Council representative Miriam Villani, and John Greenthal and Joan Leary Matthews. And, as always, the assistance of Lisa Bataille and Kathy Plog at NYSBA was invaluable. Carl is already off to an energetic start, and I'm sure the coming year will see many quality programs and activities.

Phil Dixon

(continued from page 1)

furthering the great and important work of this Section. Onward!

I have hit the ground running. To me we can all talk the talk, but I'd like to promote walking the walk in everything we do. Whether we are doing work as professionals or just leading our everyday lives at home, the decisions we make have environmental repercussions and ripple outward to those with whom we interact. More often than not our effect on others is subtle and unknown to us. What we wear, what we eat, how we transport ourselves, what we buy, the temperature of our homes, where we vacation, all these things are observed by others who are influenced in some way, exponentially so, as the person who observes you is observed by another who is observed by a couple or a family and on and on.

With this in mind, I have worked with Megan Brillault and Kristen Wilson of the P2 (Pollution Prevention) Committee on a Questionnaire that I would like every member of the Section to complete. The questions are intended to do several things. First, I'd like us all to get a sense as to the level of commitment to living green that we have as the Environmental Law Section. I do not mean to overemphasize the Environmental and ignore the Law part of our title, but I think it is important to know what lies behind the Environmental before we pursue the Law. Second, I want to encourage the membership to take a few minutes to examine and think about how we live day-to-day and to find another step we can take, and then another, and then another, at home, at the office, at our children's school, wherever we travel. There is almost always an environmental connection to each and every decision we make and action we take, and when we total it all up, how we all live as Americans, consuming considerable resources and walking with a heavy carbon footprint, our cumulative impact is significant.

Part of the beauty of the Environmental Movement is that it is totally inclusive. Democrats and Republicans call themselves Environmentalists. Democrats and Republicans travel to national parks, go on Safari in Africa, snorkel in the Galapagos, love a pretty sunset and marvel at wildlife. We all want clean air, water, soil, food and a livable planet for our children. And so we can start by uniting on the things we can all agree on, and we can all do the things we are comfortable doing, little things like buying locally grown produce, and bigger things like investing only in companies behaving in ways we approve, and supporting candidates who will pursue the goals we want them to pursue.

My hope is that with a small step like the Questionnaire we can ask ourselves, "Am I doing all I can do? Can I look deeper? Can I do more?" So, fill out the Questionnaire, your answers will be totally confidential. I am only interested in whether or not you have filled out the Questionnaire and will from time to time urge you to do so. Once we start making the aggregated findings public, we will become aware of what we can do to improve our individual efforts and thereby improve the group's efforts.

Bobby Kennedy and Al Gore and others have called the environmental crisis a "moral" crisis and have called it the civil rights issue of our time. It is all that and more as climate change presents physical threats and dangers to the very foundation that supports civil society, human health and happiness. I believe the stakes are that high and, therefore, people become paralyzed not knowing what to do. One thing we can all do is live our lives as if they matter (to the environment), because they do. Start with the Questionnaire, make changes in your lifestyle where you can, keep an eye out for the efforts others are making all around you, and then we can get to the Law portion of our title. Then we can gather the support we need to elect candidates who "get it" then we can form the kinds of communities we all want to live in with shared values.

Bill McKibben, who addressed the Section at our Fall Meeting in Lake Placid, Oct 12-14, founded and leads 350. org. He has demonstrated the immense power of the Internet as his efforts have circled the globe in minutes and involved millions of people in tens of thousands of demonstrations. People care and want to act. We can tell them what to do, but even better, we can show them, we can lead. In fact, we do lead, every day and in everything we do. The question is, "Which way are we headed?"

Mr. McKibben wrote in his latest book Eaarth that we no longer reside on the planet we all grew up on and thought we knew. The old, largely predictable, mostly stable earth enjoyed an atmosphere that protected it from too much heat and dangerous rays from the sun, and that atmosphere had a level of carbon that, for most of the 10,000 years of human habitation, was a steady 350 parts per million. At 350 ppm, the ice sheets at the poles were stable, winter build-up of glaciers melted at the right pace to supply water for drinking and irrigation to hundreds of millions of people globally, the oceans remained at fairly constant levels in terms of height and acidity. Many other global patterns were stable and predictable as well, including rainfall, temperature, seasonal fluctuations of flora and fauna. In short, the delicate balance of ecological life-support systems was in sync. That earth, according to Mr. McKibben and the vast majority of the world's leading scientists unaffiliated with the oil and gas industry, no longer exists.

The bad news is that the problem has proven to be beyond the ability of the world's leaders to handle. The last-second desperately and hastily negotiated Copenhagen

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From the Editor-in-Chief

As I write this, the election is still several weeks away. Surprisingly to me, it is a very close election. It seems that the candidates' significantly different positions on most of the issues should be dramatically reflected in the polls. They are not, but by the time this issue of *TNYEL* is published and you are reading it, we will be breathing a sigh of relief as we continue our en-



vironmental protection work as environmental lawyers, or we will be scrambling to come up with ways to protect our environment from and despite an administration whose priorities do not include the future health of the planet.

The president elected for the next four years will have to confront climate and energy policy issues that will continue to challenge our nation and the globe. How these issues are addressed will impact not only our future environmental health, but also our economy and national security. The current administration has taken some steps in the direction of environmental protection for future generations, but has more work to do if given the opportunity on November 6th.

President Obama made investments in renewable energy programs as part of the Economic Stimulus Act, and set a target for clean energy that will have 80% of electricity generated in the U.S. coming from renewable resources by 2035. During his presidency, Obama doubled the electricity generation from renewable sources so that almost 6% of the country's electricity is from non-hydropower alternative energy sources. Last year, we were a global leader in clean energy development and invested more than \$45 billion in green energy. President Obama approved 17 solar energy installation projects on public lands and favors the extension of the production tax credit for wind energy. The Department of Defense will incorporate biofuel elements into its fuel for all manner of transport, and use renewable energy on the battlefield.

President Obama supports international climate negotiations that form binding agreements to reduce greenhouse gas emissions. He implemented stricter fuel-efficiency standards requiring vehicles to average 54.5 miles per gallon by 2025 and supports the USEPA in creating harsher standards on fossil fuel-burning power plants and regulating carbon dioxide emissions and other toxins from power pants. Oil imports are lower than they have been in 15 years and Obama says he will cut current oil imports in half by 2020. He promises to end the \$4 billion in oil tax breaks. He supports offshore drilling

off Virginia's coast and supports existing drilling leases in the Chukchi and Beaufort Seas in Alaska, but opposes expanded drilling in the Atlantic and Pacific Outer Continental Shelves. President Obama supports fracking and the USEPA's power to supervise fracking projects and reduce the water and air pollution endemic to that technology.

Mitt Romney's perspective regarding crucial issues of environmental policy is unnervingly different. For example, he opposes the current administration's fuel-efficiency standards and believes binding emission reduction agreements would disadvantage the country's economy. As part of his plan to have a federal government that sees its job as helping the private sector grow and thrive, he favors removing the USEPA's power to regulate carbon dioxide emissions because of a fear that such power, a Clean Air Act mandate, would destroy the private enterprise system. Romney says he will support private sectorled development of new energy technologies, but he opposes the extension of the wind energy production tax credit and, if elected, would end subsidies on renewable energy projects. He criticized the Obama administration's investments in solar and wind energy, although, as governor of Massachusetts, he supported \$24 million of investments to that state's alternative energy projects.

Romney is in favor of energy independence and his goal is to make North America independent by 2020 using carbon-based fuels such as coal, oil, and natural gas. He would open all federal lands and waters for oil and gas drilling including the Atlantic and Pacific coasts and outer continental shelves and the Arctic National Wildlife Refuge. He plans to give states the power to issue permits to drill in public lands within state borders, including national parks. The Interior Department would no longer have the authority to lease and issue permits for drilling in federal lands and waters. He supports the expansion of the Keystone Pipeline, which would deliver Canadian oil to U.S. markets, and he supports the expansion of fracking. Romney has stated he would relax regulation on the nuclear power industry.

The visions of these two candidates paint remarkably different pictures for our future environmental health and protection. I am looking forward to November 6th with great hope for our country. I am confident that when this issue is published we will be working together as a Section to continue our great work for the protection of the environment. I just hope it will be with the support of an administration as concerned as we are about the environment and the critical issues of climate and energy policy.

Miriam E. Villani

From the Issue Editor

One would think that the hottest September since the 1880s, one of the worst droughts in history, the recordbreaking melt in the Arctic this fall, and the hottest month on record (July), coinciding with a heated presidential race, would result in debates over how to handle global climate change. Rather, not once in three presidential debates and one vice-presidential debate



was climate change mentioned. By the time you are reading this, either Mitt Romney or Barack Obama has been elected as the next President of the United States without taking a stance on the matter. The absence of any climate change discussions during their campaigns evinces a severe shift in voter priorities.

Leading up to the 2008 election both Republicans and Democrats acknowledged that anthropogenic greenhouse gas emissions are warming the Earth. As far back as the 1988 vice-presidential debate between Lloyd Bentsen and Dan Quayle, candidates of both parties stated that the greenhouse effect is an important environmental issue, agreeing that such warming could "threaten our descendant's comfort and health and perhaps even their existence." Why, then, in 2012, with the stronger evidence of climate shift, with more peer-review of the science than ever before, and with the consequences of such shift more apparent, do we find that the general population cares very little about preventing the negative consequences of climate change? It is not surprising that environmental concerns tend to rise on the public priority list in times of prosperity, and fall in tough times. Clearly the economy and unemployment rate have taken precedent over the luxury of environmentalism.

There was another catalyst, however, that knocked climate change to a low spot on the totem pole: the so-called "climategate" scandal. In 2009, just weeks before the Copenhagen Summit on Climate Change, an unknown hacker stole and published private emails from the Climatic Research Unit at the University of East Anglia. The emails were taken out of context and used as part of a smear campaign to not only discredit the researchers involved, but also to allege a global scientific conspiracy to mislead the public into believing that human beings are contributing to the warming trend on Earth. It worked: U.S. media coverage of climate change has dropped precipitously and has not recovered since

the alleged scandal. An investigation into "climategate" resulted in a reaffirmation of the scientific consensus that humans have contributed to global warming, yet it barely received any media coverage at all. Pew Research Center polls show both the highest public consensus that the globe is warming (67%), and that it is warming due to human activity (42%), since "climategate" in 2009. However, the ratio of people who consider global warming to be a "serious" or "somewhat serious" problem has remained constant during that period, and the ratio of people who feel it is "not too serious" or "not a problem" has risen. American priorities have shifted away from acting on climate change not only because the scientific integrity had been impeached, but more so because it is viewed as separate from, and in fact in opposition to, economic prosperity. Effective environmental advocacy reminds the public that climate change is not a stand-alone issue. In fact, it is intricately intertwined with the most pressing public concerns: economic and financial security; national security; and the justice and equality of our society.

Unfortunately, the cause-and-effect relationship between atmospheric greenhouse gas concentration and mean global temperature does not take a break just because we are not looking. If a tree falls in the forest and no one is around to hear it, it still makes a sound. If the global temperature is rising and nobody bothers to look at the thermometer, we will still feel the negative impacts of climate change. We need to remind people that the metaphorical "tree" is not in the forest, but is in their front yard.

In times of feverish election-year politics, hopeful candidates tailor their campaign promises around what is important to people. Proponents of reducing greenhouse gas emissions need to tie such measures to the pocketbook. People *like* LED lights because they are better for the environment than traditional light bulbs, but people buy LED lights because they save money in the long run. Just like fixing a leaky roof or deciding to quit smoking cigarettes, the longer one waits to address the problem the greater the costs are to rectify it. Climate change is no different and will create serious economic burdens that far outweigh preventative costs. If we can frame greenhouse gas reduction as an insurance policy and not a tax, if we can make people realize that it will save them money in the long run, such initiatives will be more likely to achieve public support, be introduced on a ballot, and become appealing for candidates seeking reelection.

Justin Birzon

From the 2012-2013 Student Editorial Board

For the second time in a decade, the D.C. Circuit Court has struck down the EPA's attempt at regulating the emission of sulfur dioxide and nitrogen oxide from coal and natural gas fired power plants. As a result of the decision in *EME Homer City v. EPA*, the Cross State Air Pollution Rule, or CSAPR, was vacated due to the EPA's "unnecessary over control" of emissions from downwind states. Unlike the CAIR before it, the CSAPR was completely vacated and remanded, sending the EPA back to the drawing board.

So where does this leave the EPA with regard to its quest to reduce the carbon emissions of coal- and natural gas-fired power plants? Well, with the dissolution of the CSAPR, the EPA will need to find another way to regulate emissions. Under the CSAPR, the EPA could regulate carbon emissions from coal- and natural gas-fired plants through a cap and trade system that attempts to take into account the effect of crosswinds on the emissions of upwind states that drift into downwind states. However, the CSAPR, according to the D.C. Circuit Court, failed to find a way to work within the bounds of its statutory authority under the Clean Air Act that would give fair deference to the power plant companies in states that did not comply with set EPA emissions standards.

While the CSAPR may not have succeeded in surviving the scrutiny of the Appellate Courts, it did have a positive net effect on reducing carbon emissions and encouraging power plants and their operators to signifi-

cantly curb the amount of harmful emissions they produce. Similar carbon trading-based market systems, such as RGGI in the northeast, have found success in providing financial incentives for plant operators and states that are complicit in EPA regulations for reducing carbon emissions.

The unfortunate aspect of all of this is perhaps the political dogma attached to the EPA and the effect of the CSAPR on states and businesses. It is not necessarily surprising that during a heated election year and in a poor economy, federal regulation that bears a possible negative impact on job security and electric bills may not be the most popular. Indeed, the dissent in *EME Homer* noted the majority opinion's disregard for "cooperative federalism" between states and the EPA and its necessity in maintaining air quality under the Clean Air Act.¹ While it may be that federal regulations like the CSAPR have some negative effect on businesses and their states, it is clear that states and the EPA need to rise above the politics and work together or in the future we may be saying, "Here we go again...."

Endnote

 EME Homer City Generation, L.P. v. E.P.A., No. 11-1302, 2012 WL 3570721 at *24 (D.C. Cir. 2012) (Rodgers, dissenting).

Andrew Bridgman Executive Editor, 2012-2013 Student Editorial Board Albany Law School '13

Request for Articles



If you have written an article you would like considered for publication, or have an idea for one, please contact one of *The New York Environmental Lawyer* Editors:

Miriam E. Villani

Sahn Ward Coschignano & Baker, PLLC 333 Earle Ovington Blvd., Suite 601 Uniondale, NY 11553 mvillani@swcblaw.com

Editor-in-Chief

Justin M. Birzon

104 Mt Grey Rd. East Setauket, NY 11733 justinbirzon@gmail.com

Issue Editor

Prof. Keith Hirokawa

Albany Law School 80 New Scotland Ave. Albany, NY 12208 khiro@albanylaw.edu

Issue Editor

Aaron Gershonowitz

Forchelli Curto 333 Earle Ovington Blvd. Uniondale, NY 11553 agershonowitz@fcsmcc.com

Issue Editor

Articles should be submitted in electronic document format (pdfs are not acceptable), along with biographical information.

www.nysba.org/EnvironmentalLawyer

From the 2011-2012 Student Editorial Board

Ag-Gag Bills: Gagging the Opposition Only Hurts the Public

As you browse the shelves in your local grocery stores, you may have noticed that over the past few years allegedly "cruelty free" alternatives to meat, dairy, and eggs products have cropped up at an increasing rate. Various labels now tout such products to be from "grassfed beef," "cage-free hens," or "no hormones added" livestock. Increasingly, the methods used in, and the conditions of, large-scale agribusiness farms are receiving widespread public attention. Consumers are becoming more interested in the process by which their food reaches their tables and are expressing more concern about the treatment of animals raised for human consumption. Much of this heightened interest is the result of a nationwide push by animal advocacy groups, environmental organizations, and consumer safety organizations that place a spotlight on the industries' practices.

While large-scale animal feeding operations are regulated by the U.S. Department of Agriculture, far too often the regulatory standards are inadequate and those that do exist are ineffectively and poorly enforced.² These operations, often called factory farms, can present a risk to both the environment and public health. Just one of the many environmental problems associated with factory farms is the pollution caused by the large quantities of manure-produced runoff; this waste has been linked to fish kills (resulting from dissolved oxygen) and algal blooms.³ Aside from the environmental pollution caused by runoff, the public health impacts of these operations include the degradation of both water and air quality.⁴

The use of undercover investigations by advocacy groups has repeatedly unveiled the darker side of the industries that stock our grocery shelves and refrigerators with meat, dairy, and eggs. As many will recall, in 2008 a six-week undercover investigation by the Humane Society of the United States (HSUS) revealed that sick and crippled downer cows were being killed and processed at a California slaughterhouse.⁵ Prompting a nationwide panic as the meat headed to federally funded school lunch programs, the USDA ordered a recall of 143 million pounds of beef.⁶ Several charges of animal abuse were brought when the videos revealed downed cows being struck with paddles, jabbed with electric cattle prods in the face and eyes, and shoved by forklifts. The slaughterhouse supervisor was convicted of two felony counts of animal abuse.8

New York, too, has experience with similar undercover investigations revealing animal cruelty and potential public health risks in our food supply. In 2009, an undercover member of Mercy For Animals, working on a dairy farm in Cayuga County, documented conditions and

treatment of dairy cows. The video, later released to the public and featured in an ABC News investigation, was used to confront and convict a farm employee of animal cruelty. The employee was fired and later inspections of the farm did not result in any additional charges. The confront is the same of the farm did not result in any additional charges.

In response to growing exposure and negative publicity, agribusiness is trying to prevent the concerned public from looking behind its closed doors with the introduction in many state legislatures of what are now being called "ag-gag bills." Though these bills vary from state to state, the aim is invariably to discourage whistleblowing and to criminalize undercover investigations. The Utah bill, H.B. 187, just introduced last February, would make any individual who knowingly or intentionally records an image or sound by leaving a recording device on the premises without the owner's consent guilty of agricultural operation interference, a Class A misdemeanor.¹² Recording images or sounds of an agricultural operation while either lawfully on the premises after receiving notice such action is prohibited, or while on the premises without authority, is a Class B misdemeanor. 13 New York's ag-gag bill, S.5172, will likely die in the Senate after being referred back to the Agriculture Committee earlier this year;¹⁴ however, this type of bill can easily be introduced again as agribusiness continues to lobby for such extreme measures. Other states that have or are considering similar actions include Florida, Minnesota, Nebraska, and Iowa.¹⁵

Animal advocacy organizations and other public interest organizations have come out strongly against ag-gag bills, and properly so. Ag-gag bills are contrary to public policy and impede constitutionally protected rights. ¹⁶ Undercover investigations into factory farms have consistently proved their worth, exposing systemic public health risks, environmental violations, and inhumane treatment of livestock that regulatory authorities fail to discover and disclose. The public wants to know and has a right to know what goes on behind the doors of factory farms so that consumers can make informed choices about their purchases.

New York's ag-gag bill makes it a misdemeanor for any person, including employees, to feed, videotape, or audio record any farm animal without the farm owner's prior written consent. This bill, and others like it, is overly broad and improperly infringes on First Amendment rights. If passed, S.5172 would illegalize taking a picture of a farm from a public roadway, as it is not restricted to only videos and photographs taken on the farm property. ¹⁷ Should a journalist photograph manure running off a farm property and contaminating a public water body, that journalist would be guilty of a misdemeanor. ¹⁸ A law that shields from public view environmental pollution

that constitutes a risk to human health is firmly against the public interest. The overly broad definition of farm, which includes vehicles, any buildings, land, or property on or in which farm animals are housed or cared for, illegalizes any aerial photographs that may include a farm unintentionally, or any photographs of an accident on a public highway that involves a truck transporting livestock—depending on the circumstances, these may all be protected expressions under the First Amendment. 19

The heightened protection ag-gag bills provide the agribusiness industry not only impedes the freedom of the press and violates the First Amendment, it is also simply unnecessary. Farm owners whose properties are trespassed upon are not without recourse and may use both criminal trespass laws and civil tort law to protect their property interests. Additional protections by way of aggag bills are merely attempts by agribusiness to keep the industry, and its questionable practices, out of the public spotlight by criminalizing lawful behavior and whistle-blowing. The public should make it clear to its political representatives that elevating the profit of agribusiness over the public's interest in environmentally safe and humane food production is intolerable.

Endnotes

- Such labels are often misleading. While certain third-party
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 products bearing their label and inspect for compliance with those
 standards, other labels are unverified and not subject to inspection
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- 16. For a more thorough discussion of the legal problems associated with New York's ag-gag bill specifically, see New York City Bar, Report on Legislation by the Committee on Legal Issues Pertaining to Animals (September 2011), http://www2.nycbar.org/pdf/report/uploads/20072179-Regardinglegislation NewYorkSenateBillNo. S5172AgGagBill.pdf.
- 17. S.5172, 235th N.Y. Leg. Sess.
- New York City Bar, Report on Legislation by the Committee on Legal Issues Pertaining to Animals (September 2011), http://www2.nycbar.org/pdf/report/ uploads/20072179-RegardinglegislationNewYork SenateBillNo.S5172AgGagBill.pdf.
- 19. Id

Krysten Kenny Albany Law '12 Editor-in-Chief, 2011-2012 Student Editorial Board The New York Environmental Lawyer

EPA Update

By Marla E. Wieder, Chris Saporita and Joseph A. Siegel

I. Introduction

Notwithstanding the financial crisis, the resulting federal and state budget constraints, and admonitions to "do more with less," EPA continues to use all of the tools and resources at its disposal to protect public health and the environment to the best of its ability. We might not actually be able to "do more with less" but we certainly continue to try. Here are some of the highlights of EPA's spring 2012 work.



Chris Saporita







Joseph A. Siegel

II. Superfund—In Appreciation of Remediation

A. The Hudson River PCBs Superfund Site Cleanup and Five-Year Review Report

The third season of Hudson River dredging got under way in May 2012. The cleanup of the Hudson River is being undertaken in two phases. Phase 1 of the project was conducted by General Electric Co (GE) with oversight by EPA from May to November 2009. During this phase, approximately 283,000 cubic yards of PCB-contaminated sediment were removed from a six-mile stretch of the Upper Hudson River near Fort Edward, New York. After an extensive evaluation by an independent panel of scientists and input from a broad range of stakeholders, EPA developed plans for the second part of the cleanup. Phase 2 involves removing the remainder of the contaminated river sediment targeted for dredging. Phase 2, Year 1 was conducted from June to November 2011 along a one-andone-half mile section of the River south of Ford Edward. Approximately 363,000 cubic yards of contaminated sediment were removed, exceeding the target of 350,000 yards established for the 2011 season. The dredging target for 2012 (Phase 2, Year 2) is 350,000 cubic yards of sediment, which likely will be exceeded as a result of processing facility improvements that will help to increase productivity. It is estimated that the second phase of the project will take five to seven years to complete. For more on the remediation, see: http://www.epa.gov/hudson.

Superfund cleanups are pivotal for protecting public health and the environment," said Judith A. Enck, EPA Regional Administrator. "The Hudson River PCB cleanup is accomplishing just that, while also creating 500 new jobs. This project illustrates the many benefits of the EPA's Superfund program.

On June 1st, EPA finalized the first five-year review report to determine whether the remedial actions at the site are protective of public health and the environment and functioning as designed. This five-year review was conducted for the Remnant Deposits (operable unit 1) and the in-river sediments (operable unit 2) of the Upper Hudson River. The Report concluded that the remedy at the formerly exposed Remnant Deposits Site currently protects human health and the environment as the inplace containment and cap system prevents human exposure, and the perimeter fencing and signage continue to be maintained. However, in order for the remedy to be protective in the long term, institutional controls need to be implemented to ensure that future use of the area does not compromise the integrity of the cap or result in unsafe exposures. The Report also concluded that the dredging remedy selected in the 2002 ROD, which is currently under construction, is expected to be protective of human health and the environment upon completion. In the interim, human exposure pathways that could result in unacceptable risks are being controlled. EPA anticipates that once the institutional controls have been implemented at OU1 and the dredging and Monitored Natural Attenuation remedy have been completed at OU2, the remedies will be protective of human health and the environment. To review the Report, see: http://www.epa.gov/hudson/ pdf/Hudson-River-FYR-6-2012.pdf.

In response to the Report, environmental groups and other stakeholders have urged the agency, in part, to expand the dredging to include additional areas of contamination (about 136 acres) below the Thompson Island Dam. EPA has noted that in each dredge season GE takes additional river-bottom samples near the project perimeters and GE has extended the dredging footprint by nearly 1.5 acres in this season. In addition, GE took river-bottom core samples in the areas to be dredged in 2013 and maybe 2014, and those results may lead to an expansion of the dredging in some areas.

Agreement Reached on the Dewey Loeffel Landfill, Rensselaer County

On April 11, EPA announced that it has entered into an agreement with GE and SI Group, Inc. (formerly Schenectady Chemicals, Inc.) to collect and properly dispose of contaminated groundwater and liquid leaching from the Dewey Loeffel landfill that is threatening several nearby drinking water wells. The leachate seeping from the landfill and the groundwater are contaminated with volatile organic compounds (VOCs). EPA is currently collecting the contaminated liquid waste and sending it off-site for disposal. Under the agreement, GE and SI will take on the collection and removal of the waste and the construction of a treatment plant adjacent to the landfill. The waste will continue to be sent off-site until the construction of the treatment plant is completed. Treated water from the new system will be discharged to surface water only after the EPA verifies that the treatment system is working effectively and is capable of meeting stringent state discharge limits. GE and SI Group have agreed to reimburse EPA for certain costs, including an upfront payment of \$800,000.² In addition, EPA expects to undertake a comprehensive long-term study of the soil, groundwater, surface water and sediment associated with the site in the near future. For more information on this site, see: www.epa.gov/region2/superfund/npl/dewey.

Eighteen Mile Creek, Niagara County, New York Added to the NPL

On March 13, EPA added nine new hazardous waste sites to the National Priorities List (NPL), including Eighteenmile Creek (contaminated creek) in Niagara County, New York. In addition, EPA proposed to include 10 additional sites, including the Orange Valley Regional Ground Water Contamination (contaminated groundwater plume) in Orange/West Orange, New Jersey.³

Since 1983, 1,663 sites have been listed on the NPL. Of these sites, 359 sites have been cleaned up, resulting in 1,304 sites on the NPL as of July. There are also 59 proposed sites awaiting final agency action. For more information about Superfund sites in New York and New Jersey, please visit: www.epa.gov/region02/superfund.

D. Agreement Reached for the Lower Passaic River in New Jersey

On June 18, EPA announced that it has reached agreement with 70 parties to remove approximately 16,000 cubic yards of highly contaminated sediment from a half-mile long area of the Passaic River in Lyndhurst, New Jersey. High levels of contaminants, including PCBs, mercury and dioxin, are present in the sediment. The work, which includes the removal of contaminated sediment, installation of a protective cap over the excavated area and testing of sediment treatment technologies, is scheduled to begin in spring 2013. Under the agreement, the parties will conduct and pay for the cleanup work and EPA's costs in overseeing it. The cost of the work to be performed is

estimated at \$20 million, in addition to the costs of EPA oversight.⁴ The agreement and additional information on the Lower Passaic River restoration project are available at www.epa.gov/region02/superfund/npl/diamondalkali/or www.ourpassaic.org.

III. RCRA & TSCA—Transitioning to Electronic Reporting and Tracking Systems

A. Toxic Substances Control Act (TSCA)—Electronic Reporting

On April 13, EPA announced a proposed rule to require electronic reporting for certain information (e.g. submission of information relating to chemical testing, health and safety studies, and other data) submitted to the agency under TSCA. Electronic reporting will increase the speed with which EPA can make information publicly available, increase accuracy, and provide the public with quicker access to chemical information.⁵ When final, EPA will only accept data, reports, and other information submitted through EPA's Central Data Exchange, a centralized portal that enables streamlined, electronic submission of data via the Internet. EPA solicited comments on the proposed rule and has been offering training opportunities, including webinars, for potential users to become familiar with the new requirements.⁶ For more information, see: www.epa.gov/oppt/chemtest/pubs/SIGNED_eTS-CA_NPRM_FRdocument_2012-03-30.pdf.



Resource Conservation Recovery Act (RCRA)— The Paper Manifest System

After much discussion and little objection, we may finally be transitioning away from paper manifests used to track waste shipments and disposal under RCRA to a tracking electronic system. EPA has estimated that the RCRA cradle-to-grave manifest system generates approximately 2 million to 5 million forms per year, resulting in an annual paperwork burden that exceeds \$200 million. This long overdue transition to an electronic tracking system seems to be one of the few concepts on which both Democrats and Republicans can agree. A June 2012 congressional hearing on this issue and the proposed legislation (S. 710) that would direct the EPA Administrator

to establish a hazardous waste electronic manifest system was described as "one of the shortest and least contentious hearings this Congress." The legislation also authorizes the Administrator to impose a fee on the users of the new system, authorizes the creation of a revolving fund, paid for by the regulated community, to allow the Administrator to pay for costs incurred in developing, operating, maintaining, and upgrading the system, and requires the Administrator to periodically report on the financial status of the revolving fund. The bill also requires that facilities receiving hazardous waste also report their waste handling so that a state can track waste that was generated in or shipped through the state. On August 3, 2012 the bill passed through the Senate, without amendment, by unanimous consent.8 For more on the Hazardous Waste Electronic Manifest System, see www.epa.gov/osw/hazard/ transportation/manifest/e-man.htm.

IV. Brownfields Redevelopment and Green Buildings

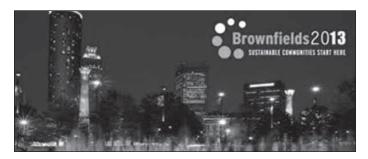
A. Brownfields Update

It's never too early to start your 2013 planning. The National Brownfields 2013 Conference will be held in Atlanta, Georgia from May 15th through the 17th. The conference, cosponsored by EPA, is the largest and most comprehensive forum for the examination of issues important to community revitalization and the assessment, cleanup and redevelopment of contaminated properties. For more information on the conference, see: www.brownfields conference.org/en/home.

On May 31, 2012, EPA, through its Brownfields Program, provided a total of \$970,000 to New York City and Ogdensburg, New York to clean up abandoned and contaminated sites. New York City received \$650,000 to support a revolving loan fund from which the city will provide loans and sub-grants to support cleanup of contaminated sites in the five boroughs. Grant funds also will be used to oversee fund management activities and provide technical support for the program. The City of Ogdensburg received \$320,000 to assess sites with hazardous substances and petroleum contamination throughout the city. Grant funds also will be used to conduct community outreach and cleanup planning activities. 9 In addition to these grants, EPA will also be providing \$2.8 million to Newark and Jersey City to help with their efforts to assess and redevelop properties in their area.¹⁰

In the Spring of 2012, EPA also announced a total of more than \$69.3 million in new Brownfields grants that will assist in the ongoing effort to place contaminated parcels back into reuse and boost the local economies. The 214 grantees receiving grants through the Brownfields Assessment, Revolving Loan Fund, and Cleanup Grants programs include tribes and communities in 39 states across the country. Information on grant recipients can be found at: www.epa.gov/brownfields. For more on EPA's Brownfields Program, see: www.epa.gov/brownfields/.

EPA estimates that there are an estimated 450,000 abandoned and contaminated waste sites in the United States. In 2011, EPA's Brownfields Program leveraged 6,447 jobs and \$2.14 billion in cleanup and redevelopment funds. Since the beginning of the program, EPA's brownfields investments have leveraged more than \$18.3 billion in cleanup and redevelopment funding from a variety of sources and have resulted in approximately 75,500 jobs. More than 18,000 properties have been assessed, and over 700 properties have been cleaned up.¹²



B. Green Buildings—Energy Star Rankings Released

In April 2012, EPA released its list of cities with the most Energy Star buildings in the United States. Los Angeles, Washington, D.C., Atlanta, Chicago, San Francisco ranked in the top five, just beating out New York, which took 6th place. By the end of 2011, the nearly 16,500 Energy Star certified buildings across America have helped save nearly \$2.3 billion in annual utility bills and prevent GHG emissions equal to emissions from the annual energy use of more than 1.5 million homes. ¹³

Cities with the Most Energy Star Buildings in the U.S.					
2011 Rank	Metro Area	ENERGY STAR Certified Buildings	Annual Cost Savings (millions)		
1	Los Angeles	659	\$149.8		
2	Washington, DC	404	\$118.6		
3	Atlanta	359	\$55.0		
4	Chicago	294	\$86.8		
5	San Francisco	270	\$99.6		
6	New York	261	\$135.5		
7	Houston	231	\$79.7		
8	Dallas-Fort Worth	178	\$39.2		
9	Riverside, Ca.	164	\$17.9		
10	Boston	161	\$61.1		
www.energystar.gov/ia/business/downloads/ 2011 Top Cities chart.pdf					

Energy use in commercial buildings accounts for nearly 20 percent of U.S. GHG emissions at a cost of more than \$100 billion per year. Energy Star certified buildings use an average of 35 percent less energy and are responsible

for 35 percent less carbon dioxide emissions than typical buildings. ¹⁴ For more on Energy Star certified buildings, see: http://energystar.gov/buildinglist. For more on earning the Energy Star label for commercial buildings, see: http://energystar.gov/labeledbuildings.

V. Climate Change and Air

A. Climate Change Mitigation

Big Win for EPA in D.C. Circuit on Greenhouse Gas Regulations

The biggest news on climate change this past quarter was the D.C. Circuit's unanimous decision on June 26, 2012, in *Coalition for Responsible Regulation v. EPA*, ¹⁵ to uphold EPA's landmark greenhouse gas (GHG) regulations. The three-judge panel either denied or dismissed petitions challenging four EPA GHG rules, including EPA's Endangerment and Cause or Contribute Findings for GHGs ("Endangerment Finding"), ¹⁶ Light Duty Vehicle GHG Emissions Standards ("Light Duty Rule"), ¹⁷ Reconsideration of Interpretation of Regulations That Determine Pollutants Covered by Clean Air Act Permitting Programs ("Timing Rule"), ¹⁸ and Prevention of Significant Deterioration and Title V GHG Tailoring Rule ("Tailoring Rule"). ¹⁹

The court rejected the Petitioners' challenge to EPA's reliance in the Endangerment Finding on assessments by authoritative bodies on climate change, such as the Intergovermental Panel on Climate Change, the U.S. Global Change Research Project, and the National Research Council. The court noted that "this is how science works...EPA is not required to re-prove the existence of the atom every time it approaches a scientific question." The 82 page opinion cites extensively to the authority of the Supreme Court's decision in *Massachusetts v. EPA*²⁰ as a basis for upholding EPA's GHG regulations. In one instance, for example, the court invoked Massachusetts v. EPA as authority to reject the Petitioners' argument that EPA had discretion to delay regulation of GHGs after making the Endangerment Finding. ("If EPA makes a finding of endangerment, the Clean Air Act requires the Agency to regulate the emissions of the deleterious pollutant from new motor vehicles. 549 U.S. at 543."21) The D.C. Circuit also concluded that Petitioners did not have standing to challenge the Tailoring and Timing Rules as they fell far short of establishing the "irreducible constitutional...elements" of standing because Petitioners could not show injury in fact. The court noted that, "indeed, the Timing and Tailoring Rules actually mitigate Petitioners' purported injuries."22

In testimony on June 29, 2012, following the D.C. Circuit decision, EPA Assistant Administrator Regina McCarthy stated that EPA's regulatory actions on climate change have been shown to reflect good science and law but they are also good policy.²³ She remarked that, since 1970, the history of the Clean Air Act has demonstrated that clean air and a healthy economy go hand in hand.

2. EPA Proposes First Clean Air Act Standard for Carbon Pollution from Future Power Plants

In another major development on climate change, EPA published its proposed Standards of Performance for Greenhouse Gas Emissions for New Stationary Sources: Electric Utility Generating Units on April 13, 2012 (signed on March 27, 2012). ²⁴ EPA proposed the rule pursuant to Section 111 of the Clean Air Act, the statutory program referred to as the New Source Performance Standards (NSPS). ²⁵ EPA's rule applies only to new power plants over 25 megawatts and reflects an ongoing trend in the power sector toward cleaner technologies that will become the next generation of power plants. ²⁶ EPA's rule will ensure that this trend continues.

The proposal does not dictate the kind of fuel that future power plants can burn, but it limits their emissions to 1,000 pounds of CO2 per megawatt-hour. New natural gas combined cycle (NGCC) plants can meet this standard without add-on controls and, in fact, 95% of those plants built since 2005 would meet the standard. EPA determined that 1,000 pounds of CO₂ per megawatt-hour satisfies the statutory requirement to establish a "standard of performance" under Section 111(a) of the Clean Air Act and is based on NGCC as the "best system of reduction" that has been adequately demonstrated.²⁷ New plants that burn coal or petcoke would have to use add-on technology, such as carbon capture and storage, to meet the standard. The proposed rule includes a 30-year averaging period that would provide flexibility for sources wishing to phase in controls.

Due to economic and other factors related to gas and coal power generation, EPA and DOE expect that most plants built in the next ten years will likely meet the standard even in the absence of the rule. Current investment decisions in the power sector suggest that the proposed rule will not have notable costs and is not projected to have an impact on electricity prices or reliability.²⁸ Upon signing the proposed rule, EPA Administrator Lisa P. Jackson commented that "Right now there are no limits to the amount of carbon pollution that future power plants will be able to put into our skies—and the health and economic threats of a changing climate continue to grow. We're putting in place a standard that relies on the use of clean, American made technology to tackle a challenge that we can't leave to our kids and grandkids."29 The public comment period on the rule ended on June 25, 2012 and EPA received nearly 13,000 comments.³⁰

3. EPA Finalizes Step 3 of Tailoring Rule

On July 12, 2012, EPA published its final rule for step 3 of the Tailoring Rule.³¹ The Tailoring Rule was promulgated on June 3, 2010³² and was recently upheld by the D.C. Circuit (see related news item above). The rule raised the Clean Air Act applicability thresholds of 100 and 250 tons per year (TPY) to 75,000 and 100,000 TPY for GHGs, measured in carbon dioxide-equivalent (CO2e). EPA promulgated the Tailoring Rule to avoid overwhelming the

capabilities of state and local permit programs with the many GHG sources that would have otherwise become subject to review.

The July 12 action was the third step in phasing in GHG applicability in the Prevention of Significant Deterioration (PSD) and Title V Clean Air Act programs. It follows step 1, which began on January 2, 2011 and applied to GHG sources that were required to obtain a PSD permit for other pollutants anyway, and step two, which went into effect on July 1, 2011. Step 2 applied PSD permit requirements to new facilities with GHG emissions of at least 100,000 tons per year (tpy) CO2e and existing facilities that emit 100,000 tpy of CO2e and make changes that increase the GHG emissions by at least 75,000 tpy of CO2e.³³

The purpose of step 3, among other things, was to determine whether EPA could lower the threshold to as low as 50,000 tpy of CO2e and, as a result, bring additional, smaller GHG sources into the PSD and Title V programs. In the July 12 action, EPA decided that it would not lower the thresholds established in the first two steps because state and local agencies have not had sufficient time and opportunity to develop the necessary infrastructure, expertise and capacity for GHG permitting, and EPA and the states have not had the opportunity to develop streamlining measures that would improve permitting implementation.³⁴ The July 12 rule also includes a streamlining procedure for sources that would like to develop plant-wide applicability limits for GHGs. As of May 21, 2012, EPA and state permitting authorities had issued 44 PSD permits addressing GHG emissions. These permits require implementation of energy efficiency measures at new facilities and existing facilities that make major modifications. The July 12 final rule and additional information can be found at: http://www.epa.gov/nsr/actions.html.

B. National Ambient Air Quality Standards Developments

1. EPA Settles NAAQS Deadline Suit on Particulate

In accordance with Section 113(g) of the Clean Air Act, EPA published notice on June 26, 2012 of a proposed consent decree settling two lawsuits alleging that EPA had violated a nondiscretionary duty to complete a five-year review of the National Ambient Air Quality Standards (NAAQS) for particulate matter.³⁵ EPA is required to review each NAAQS pollutant at five-year intervals and revise as may be appropriate.³⁶ Under the terms of the settlement, EPA agreed to sign a notice of final rulemaking by December 14, 2012, setting forth its final decision on its review of the particulate matter NAAQS and promulgating revisions and/or new NAAQS as may be appropriate. The public comment period expired on July 26, 2012.

2. EPA Proposes New NAAQS for PM2.5

Related to EPA's settlement of the NAAQS deadline suit for particular matter, on June 14, 2012 EPA proposed

to strengthen the annual NAAQS for fine particulate matter by revising the PM2.5 standards from 15 to 12 micrograms per cubic meter. EPA also proposed setting a separate fine particle standard to improve visibility in urban areas, updates and improvements to the national PM2.5 monitoring network and updates to the Air Quality Index.³⁷ In its review leading to the strengthened standards, EPA examined thousands of studies, including 300 epidemiological studies that demonstrate adverse health effects even in areas meeting the current PM2.5 NAAQS. The proposed rule and additional information is available at http://www.epa.gov/airquality/particlepollution/actions.html.

3. EPA Finalizes Revisions to the Cross-State Air Pollution Rule

On June 12, 2012, EPA finalized revisions to the Cross State Air Pollution Rule (CSAPR) that will, among other things, increase the budgets of SO2 and NOx for 13 states, including New York.³⁸ After EPA issued the final CSAPR on July 6, 2011, the Agency identified discrepancies in certain data assumptions that affected the calculations of the budgets of the 13 states. On December 30, 2011, the D.C. Circuit stayed CSAPR pending appeal but left in place the Clean Air Interstate Rule (CAIR), which is the predecessor to CSAPR. Oral arguments on the challenges to CSAPR were held in the D.C. Circuit on April 13, 2012. A decision on CSAPR is expected this summer. In the June 12 final rule. EPA revised the 2012 and 2014 final budgets for New York and other states. These revisions were promulgated so that the CSAPR program is ready for implementation if and when the D.C. Circuit lifts the stay. The final rule is available at http://www.gpo.gov/fdsys/pkg/FR-2012-06-12/pdf/2012-14251.pdf.

4. EPA Finalizes Actions in the NY-NJ-CT Ozone Nonattainment Area

On June 18, 2012, EPA finalized four independent actions related to the New York-Northern New Jersey-Long Island (NY-NJ-CT) one-hour and 1997 eight-hour ozone nonattainment areas.³⁹ EPA determined that the NY-NJ-CT one-hour ozone nonattainment area previously failed to attain the one-hour ozone NAAQS by its applicable attainment deadline of November 15, 2007, based on 2005-2007 monitoring data. However, the area is attaining the standard based upon 2008-2010 data, and 2011 data indicates that the area continues to attain the standard. EPA also determined that the NY-NJ-CT eight-hour ozone nonattainment area attained the 1997 eight-hour standard by the applicable deadline, June 15, 2010, based on 2007-2009 data, is currently meeting the standard based on 2008-2010 data, and continues to meet the standard based on indications from the 2011 data. In New York, the affected counties under the one-hour standard include Bronx, Kings, Nassau, New York, Queens, Richmond, Rockland, Suffolk, Westchester, and part of Orange County. No portion of Orange County is included in the eight-hour 1997 ozone standard designation.

In a separate action on May 21, 2012, EPA designated initial area designations for the primary and secondary eight-hour ozone NAAQS, pursuant to Section 107(d) of the Clean Air Act. 40 A chart with the final designations for all states, including New York, can be found at: http://www.epa.gov/groundlevelozone/designations/2008standards/regs.htm. A map of United States containing county-by-county designations can be found at: http://www.epa.gov/groundlevelozone/designations/2008standards/final/finalmap.htm.

EPA Wins Important NAAQS Victories in the D.C. Circuit

EPA recently won two cases in the D.C. Circuit involving challenges to the Agency's final rules on the SO2 and NO2 NAAQS. On July 17, the D.C. Circuit denied petitions of the American Petroleum Institute and the Utility Air Regulatory Group that challenged EPA's final one-hour NAAQS for NO2.41 EPA had adopted the new NO2 standard in 2010 as "the three-year average of the annual 98th percentile of the daily maximum 1-hour average concentration less than or equal to 100 ppb."42 The D.C. Circuit found that EPA was not arbitrary and capricious in relying on the data and studies it used to set the new standard. The court also rejected the petitioners' argument that a statement in the preamble to the rule regarding permitting was final agency action subject to review. The court declined jurisdiction on the permitting issue because EPA had simply acknowledged in the preamble that it "had not yet, but 'w[ould] need to...carefully evaluate' the effect of the new NAAQS on the permitting process."

In a July 20 decision, 43 the D.C. Circuit dismissed and denied state and industry petitions challenging EPA's new 1-hour SO2 NAAQS promulgated on June 22, 2010.44 The 1-hour standard is intended to prevent asthmatics from being exposed to short-term bursts of SO2 lasting five to ten minutes. The court determined that EPA was not arbitrary and capricious in adopting a 75 ppb standard pursuant to its duty to promulgate NAAQS that are "requisite to protect the public health" with an "adequate margin of safety." The court also found that EPA did not fail to follow notice-and-comment provisions of the Administrative Procedure Act when it included language in the preamble to the final rule about a hybrid method of determining attainment of the new standard. The court pointed out that EPA stated in the preamble that the Agency would solicit public comment prior to finalizing guidance on using a combination of modeling and monitoring to determine attainment. As a result, the court declined to exercise jurisdiction on this issue.

C. Other Air Pollution Developments

EPA Releases Guidance on Fuel Availability Provisions for Ships Off the Coast of North America

On June 26, EPA released interim guidance for ship owners and operators clarifying how the United States

will implement the United Nations International Maritime Organization (IMO) requirement to limit air pollution from ships. ⁴⁵ The IMO has officially designated waters off the coast of North America, known as the North American Emission Control Area (North American ECA), as an area requiring stringent international pollution standards for ships. The standards include fuel sulfur limits. The IMO requirement derives from Annex VI of the International Convention for the Prevention of Pollution from Ships (MARPOL) and is implemented in the United States under the authority of amendments to the Act to Prevent Pollution from Ships (APPS).

The North American ECA, which includes the Atlantic coast, limits the maximum sulfur content of fuel oil used by ships in the ECA will be limited to 1.00 percent m/m (10,000 ppm). This standard will change on January 1, 2015, to 0.10 percent m/m (1,000 ppm). EPA's June 26 guidance for ship owners and operators clarifies how the U.S. government will implement fuel availability provisions when ships are unable to obtain fuel that meets IMO sulfur in fuel standards and how ship owners and operators can make a fuel unavailability claim. 46

EPA Phases Out Stage II Vapor Recovery at the Gas Pump: Replaced by On-Board Refueling Vapor Recovery Systems

On May 10, 2012, EPA issued a final rule that will eliminate the requirement for gas stations to have Stage II vapor recovery systems at the pump.⁴⁷ This rule applies to the ozone transport region, which includes New York. Stage II vapor recovery systems recover ozone-forming volatile organic compounds and toxics that are forced out of the tank when loading at the pump.⁴⁸ Due to a 1990 Clean Air Act Amendment requirement, beginning in 1998, newer vehicle fleets began to install on-board refueling vapor recovery systems (ORVR) that reduce VOC emissions during refueling by using a carbon canister that captures the vapors from the tank before they reach the pump. As of 2006, all new cars, pick-up trucks, vans, and SUVs are manufactured with ORVR, making Stage II vapor recovery systems at the pump redundant. Beginning later this year, states may begin the process of phasing out vapor recovery systems at the pump. This final rule will ensure that air quality and public health are protected while potentially saving the approximately 31,000 affected gas stations located in mostly urban areas more than \$3,000 each year when fully implemented. More information is available at: http://www.epa.gov/air/ozone pollution/.

3. Port Authority of New York and New Jersey Honored by Northeast Diesel Collaborative

On April 12, the Northeast Diesel Collaborative, a partnership between the EPA, state agencies, and private and nonprofit groups honored several agencies and organizations from Massachusetts, New Jersey, New York and

Vermont.⁴⁹ Included in the honorees was the Port Authority of New York and New Jersey.

The Northeast Diesel Collaborative brings together the collective resources and expertise of EPA, several state environmental agencies and private sector companies to address emissions from existing diesel-powered vehicles and equipment. The Port Authority of New York and New Jersey was recognized for efforts under its 2009 "Clean Air Strategy for the Port of NY & NJ," which was designed to reduce greenhouse gas and other pollutant emissions from all port-related sources.

The Port Authority incorporated input from local and state agencies, tenants and customers, as well as environmental and community stakeholders into its strategy. The Port Authority's initiatives include its Truck Replacement Program, Truck Phase Out Plan, and the Ocean-Going Vessel Low-Sulfur Fuel Program. In recognition of the Port Authorities efforts, EPA Region 2 Regional Administrator Judith A. Enck said that "pollution from diesel engines is linked to asthma, respiratory problems, heart attacks and even premature death, and is especially dangerous to children and the elderly. Reducing air pollution from diesel engines has enormous health benefits and translates directly into fewer hospitalizations, less missed days of work and school and a better quality of life for everyone." For more information on the PANYNJ Clean Air Strategy, please visit: http://www.panynj.gov/about/port-initiatives.html. To learn more about the Northeast Diesel Collaborative, visit: http://www.northeastdiesel.org.

4. EPA Announces \$20 Million in Grant Funding for Clean Diesel Projects

On April 23, EPA announced the availability of up to \$20 million in Fiscal Year 2012 grant funding to establish clean diesel projects aimed at reducing harmful pollution from the nation's existing fleet of diesel engines. ⁵⁰ An additional \$9 million will be available through direct state allocations. EPA estimates that for every \$1 spent on clean diesel funding, up to \$13 of public health benefit is realized.

While EPA has issued standards to make new diesel engines 90 percent cleaner, there are nearly 11 million operating older diesels that predate the standards and emit large quantities of nitrogen oxides and particulate matter. The Diesel Emissions Reduction Act (DERA) was passed in 2005 as part of broader energy legislation and then reauthorized in 2011. Since DERA was first funded in Fiscal Year 2008, EPA has awarded over 500 grants, many of which have gone to modernize older school buses, transit buses, heavy-duty diesel trucks, marine engines, and locomotives. In addition, many of the grants have gone to economically disadvantaged communities whose residents suffer from higher-than-average instances of respiratory ailments. The closing date for receipt of proposals was June 4, 2012.

EPA Finalizes New Air Standards for Oil and Gas Production Facilities

In response to a court deadline, EPA finalized standards to reduce harmful air pollution associated with oil and natural gas production.⁵² The final rules include the first federal air standards for natural gas wells that are hydraulically fractured. The standards, which were required by Section 111 of the Clean Air Act (the New Source Performance Standards) and Section 112 of the Act (the National Emissions Standards for Hazardous Air Pollutants), were informed by important feedback from a range of stakeholders including the public, public health groups, states and industry.⁵³ The stakeholder process resulted in final standards that reduce implementation costs, are achievable, and can be met by relying on proven, cost-effective technologies that reduce emissions by 95% and processes already in use at approximately half of the fractured natural gas wells in the United States. The technologies will also make it possible for companies to collect additional natural gas that can be sold.

The rule has two phases. During the first phase, until January 2015, owners and operators must either flare their emissions or use emissions reduction technology called "green completions," which are already widely deployed at wells. In 2015, all new fractured wells will be required to use green completions. EPA estimates that 13,000 new and existing natural gas wells are fractured or re-fractured each year. As those wells are being prepared for production, they emit volatile organic compounds (VOCs), which contribute to smog formation, and air toxics, including benzene and hexane, which can cause cancer and other serious health effects. In addition, the rule is expected to vield a significant environmental co-benefit by reducing methane, the primary constituent of natural gas. Methane, when released directly to the atmosphere, is a potent greenhouse gas, more than 20 times more potent than carbon dioxide. "The president has been clear that he wants to continue to expand production of important domestic resources like natural gas, and today's standard supports that goal while making sure these fuels are produced without threatening the health of the American people," said EPA Administrator Lisa P. Jackson.⁵⁴

VI. Water

A. Protection and Restoration

EPA to Work with Drinking Water Systems to Monitor Unregulated Contaminants

On May 1, 2012, EPA published a list of 28 chemicals and two viruses that approximately 6,000 public water systems will monitor from 2013 to 2015 as part of the agency's unregulated contaminant monitoring program, which collects data for contaminants suspected to be present in drinking water, but that do not have health-based standards set under the Safe Drinking Water Act. EPA has standards for 91 contaminants in drinking water, and the Safe Drinking Water Act requires that EPA identify up to

30 additional unregulated contaminants for monitoring every five years.

EPA will spend more than \$20 million to support the monitoring, the majority of which will be devoted to assisting small drinking water systems with conducting the monitoring. The data collected under the Unregulated Contaminant Monitoring Rule 3 (UCMR 3) will inform EPA about the frequency and levels at which these contaminants are found in drinking water systems across the United States and help determine whether additional protections are needed to ensure safe drinking water. State participation in the monitoring is voluntary, and EPA will fund small drinking water system costs for laboratory analyses, shipping and quality control.

The contaminants to be studied include total chromium and hexavalent chromium, also known as chromium-6. In January 2011, EPA issued guidance to all water systems on how to assess the prevalence of hexavalent chromium and in the March 2011 proposal for UCMR 3, EPA invited comments on whether the agency should include chromium in the final rule. Public comments received by EPA were strongly supportive of adding total chromium and hexavalent chromium for monitoring. Additional contaminants of concern were selected based on current occurrence research and health-risk factors. For more information, visit: http://water.epa.gov/lawsregs/rulesregs/sdwa/ucmr/ucmr3/index.cfm.

EPA Holds Citizen Science Workshops in New York and New Jersey

On June 19 and 20, EPA held two day-long workshops in Manhattan and Edison, respectively, to share information about ways in which people can get involved in collecting environmental quality data in their communities. The workshops brought together representatives from federal, state and local government agencies, as well as experts from academia and community-based groups, to help educate the growing corps of "citizen scientists."

Citizen science is a form of research that enlists the public in collecting a wide range of environmental data to expand scientific knowledge and literacy. Topics covered in the workshops included: starting a citizen science program; funding sources; community and government/academic partnerships; success stories; data interpretation and use and current and emerging monitoring tools and technologies. For access to the workshop presentation materials, visit: http://www.epa.gov/region02/citizen science/.

EPA is currently developing a Citizen Science web site to promote collaboration, coordination and communication. The web site will feature links to news on current technology trends and monitoring, funding sources, technical resources, training opportunities, regulatory and academic partnerships, success stories, as well as an open forum discussion, to continue the dialogue among individual citizens, community groups, non-governmental

organizations, government agencies, and academia in Region 2 and beyond.

3. EPA Provides \$171,256 in Grants to New York State Groups to Educate People About Efforts to Restore Urban Rivers

Also in June 2012, EPA announced that it will provide grants to three community organizations in New York State to help restore urban waters, support community revitalization efforts and protect the health of people living near these waterways. The grants will be awarded to the Hudson River Sloop Clearwater, Groundwork Hudson Valley and Rocking the Boat, which will focus on the Bronx River. The funding is part of the EPA's Urban Waters program, which supports community efforts to restore and revitalize local canals, rivers, lakes, wetlands, aquifers, estuaries, bays and ocean areas and provide access to them.

The Hudson River Sloop Clearwater will receive \$59,855 to teach youth in the Fall Kill Watershed about watershed science and green infrastructure, and help them design signs to educate and inspire their communities. The organization will also provide technical guidance to about 100 local landowners on how they can prevent their properties from contributing to water pollution, and will consult with 20 homeowners about green infrastructure designs for their properties and implement the projects on 10 of them. Groundwork Hudson Valley will receive \$51,401 to conduct a series of community meetings, planning and training sessions and workshops in Westchester County to educate people living near the Saw Mill River community about water quality and green infrastructure. The organization will also conduct outreach to neighborhood residents and businesses, and conduct educational sessions with local students. Rocking the Boat will receive \$60,000 to work with local students and others in handson restoration, monitoring, and educational activities both on and around the Bronx River. For more information, visit: http://www.epa.gov/urbanwaters/index.html.

B. Regulation and Guidance

1. EPA Releases Draft Permitting Guidance for Using Diesel Fuel in Oil and Gas Hydraulic Fracturing

On May 4, EPA released draft underground injection control (UIC) program permitting guidance for class II wells that use diesel fuels during hydraulic fracturing activities. EPA developed the draft guidance to clarify how companies can comply with a 2005 law that exempted hydraulic fracturing operations from the requirement to obtain a UIC permit, except in cases where diesel fuel is used as a fracturing fluid.

The draft guidance outlines for EPA permit writers, where EPA is the permitting authority, requirements for diesel fuels used for hydraulic fracturing wells, technical recommendations for permitting those wells, and a description of diesel fuels for EPA underground injection

control permitting. The draft guidance describes diesel fuels for these purposes by reference to six chemical abstract services registry numbers. For more information, visit: http://water.epa.gov/type/groundwater/uic/class2/hydraulicfracturing/hydraulic-fracturing.cfm.

2. EPA Issues Post-Construction Compliance Monitoring Guidance

Also in May, EPA issued final guidance on conducting effective post-construction compliance monitoring to assess the performance of measures implemented under long-term combined sewer overflow (CSO) control plans, as provided in EPA's 1994 CSO Control Policy. This guidance will assist CSO permittees in developing post-construction compliance monitoring plans that collect sufficient data for evaluating the effectiveness of CSO controls and assessing compliance with the requirements of the Clean Water Act. The Agency developed a draft of the guidance, and received comments from state National Pollutant Discharge Elimination System ("NPDES") authorities and other stakeholders. For more information, visit: http://cfpub.epa.gov/npdes/home.cfm?program_id=5.

EPA Releases Fact Sheet on the Economic Benefits of Protecting Healthy Watersheds

EPA recently released a new fact sheet as part of its Healthy Watersheds initiative, describing the economic benefits of protecting healthy watersheds by highlighting examples from existing peer-reviewed literature and studies. EPA's Healthy Watersheds Initiative is intended to protect the nation's remaining healthy watersheds, prevent them from becoming impaired, and accelerate restoration successes. It encourages interested states to take a strategic, systems approach to protecting healthy watersheds that recognizes the dynamic and interconnected nature of aquatic ecosystems.

The fact sheet describes studies that demonstrate that protecting healthy watersheds can reduce capital costs for water treatment plants and reduce damages to property and infrastructure due to flooding, thereby avoiding future costs. Additionally, examples in the fact sheet show that protecting healthy watersheds can generate revenue through property value premiums, recreation, and tourism. This fact sheet directs readers to important resources to learn more about the substantial efforts to monetize ecosystem services from across the country. This fact sheet is also a resource for those doing outreach to promote the protection of healthy watersheds. It is available at: http://www.epa.gov/healthywatersheds.

4. EPA Announces Framework to Help Local Governments Manage Stormwater Runoff and Wastewater

On June 5, EPA issued a new framework to help local governments meet their Clean Water Act obligations. The Integrated Municipal Stormwater and Wastewater Planning Approach Framework assists EPA regional offices, states, and local governments to develop voluntary storm and wastewater management plans and implement effective integrated approaches that will protect public health by reducing overflows from wastewater systems and pollution from stormwater. In developing the framework, EPA worked in close coordination with a variety of stakeholders, including publicly owned treatment works, state water permitting authorities, local governments, and nonprofit environmental groups. EPA's framework outlines new flexibility to pursue innovative, cost-saving solutions, like green infrastructure, and will help communities as they develop plans that prioritize their investments in storm and wastewater infrastructure. For more information, visit: http://cfpub.epa.gov/npdes/integratedplans.cfm.

EPA Withdraws Proposal to Collect Information About Concentrated Animal Feeding Operations

July 20, EPA announced its withdrawal of a proposed rule that would have required information to be submitted to the EPA about concentrated animal feeding operations (CAFOs). EPA sought public comment on the proposal, and in light of comments received from states regarding the amount of CAFO information states already have and include as part of the CAFO permitting process, EPA decided that it will instead use existing federal, state, and local sources of information to gather data about CAFOs and help ensure that CAFOs are implementing practices that protect water quality. EPA also signed a memorandum of understanding with the Association of the Clean Water Administrators (ACWA) to facilitate the exchange of information. This collaborative effort between the EPA and ACWA will focus on identifying CAFOs and obtaining pertinent information about CAFOs on a state-by-state basis for use by both ACWA members and EPA. For more information: http://cfpub.epa.gov/npdes/afo/aforule. cfm#withdrawal.

6. EPA Releases Green Infrastructure Permitting and Enforcement Fact Sheets

On June 25, EPA released a series of six fact sheets on incorporating green infrastructure measures into NPDES wet weather programs. The series builds upon existing EPA authority, guidance and agreements to describe how EPA and state permitting and enforcement professionals can work with permittees to include green infrastructure measures as part of control programs. The six fact sheets and four supplements address stormwater permits, total maximum daily loads, combined sewer overflow long-term control plans, and enforcement actions. The series is available at: http://water.epa.gov/infrastructure/green-infrastructure/gi_regulatory.cfm#permittingseries.

7. EPA Issues Final Clean Water Act Section 404 Enforcement and Coordination Strategy

On July 11, in response to an October 26, 2009 report by the EPA Office of the Inspector General, the agency released its new Clean Water Act Section 404 Enforcement and Coordination Strategy. The strategy was piloted for a year and revised based on feedback from EPA regional offices, headquarters and the Corps of Engineers. The key elements of the final strategy are (1) establishing nationally consistent enforcement definitions, (2) leveraging program resources to more systematically identify Section 404 violations, (3) establish a national framework to track complaints, referrals and repeat and flagrant violators, (4) strengthen coordination between EPA offices and other agencies involved in protecting our nation's wetlands and other aquatic resources, and (5) case prioritization and coordination. For a copy of the strategy, visit: http://www.epa.gov/compliance/resources/policies/civil/cwa/cwa404enf-strategy.pdf.

C. Compliance and Enforcement

1. Great Gun Beach Public Water System

On April 2, 2012, EPA and officials for the Town of Brookhaven executed a Consent Agreement and Final Order that requires the Town to install a raw water tap to be used to monitor the quality of the drinking water being provided by its public water system, complete a solar power supplemental environmental project at a cost of \$35,280 to supply power to the Great Gun Beach, and pay a cash penalty of \$1,200. The settlement arises from an October 6, 2011, EPA Administrative Complaint against the Town's Parks Department for failure to monitor the public drinking source located at Great Gun Beach, as required by the Safe Drinking Water Act.

2. EPA Agreement with Amtrak Brings Greater Drinking Water Protections for Riders

In late April, EPA entered into an agreement with the National Railroad Passenger Corp. (Amtrak) to ensure safe and reliable drinking water for the railroad's passengers and crews. To better protect the riding public from illnesses caused by microbiological contamination, the agreement requires Amtrak to, among other things, monitor all the drinking water systems on its railcars for pathogens, properly maintain its disinfection and system flushing, and take necessary corrective actions.

3. EPA Enters into Consent Decree with Perth Amboy to Upgrade Sewer System

On June 6, the United States lodged a consent decree with the City of Perth Amboy, New Jersey, in which the City agreed to make major improvements in its combined sewer system to protect human health and water quality. Under the agreement, the City will reduce the amount of sewage and other pollutants that flow out of its 16 combined sewer points into the Raritan River and Arthur Kill. EPA alleged that Perth Amboy violated the Clean Water Act and its New Jersey Department of Environmental Protection discharge permit by failing to properly maintain and operate its sewer system, conduct regular inspections or have a pollution prevention plan in place. The City also violated a previously issued EPA order to address Clean Water Act violations.

It is estimated that almost 370 million gallons of sewage flow into the Raritan River and Arthur Kill River through Perth Amboy's combined sewer system each year. Under the agreement, Perth Amboy will spend about \$5.4 million for the repair, upgrade and expansion of the city's combined sewer system, and will pay a \$17,000 penalty. The City has also agreed to increase the amount of wastewater that reaches the treatment plant to reduce its combined sewer overflows into the Raritan River and Arthur Kill. The consent decree was subject to a 30-day public comment period that ended on July 23, and is subject to final court approval. It can be viewed at http://www.justice.gov/enrd/Consent_Decrees.html.

Homebuilder Toll Brothers Inc. to Pay \$741,000 Clean Water Act Penalty and Implement Company-Wide Stormwater Controls to Prevent Discharges of Sediment and Polluted Stormwater Runoff

On June 20, EPA and the U.S. Department of Justice announced that Toll Brothers Inc., one of the nation's largest homebuilders, will pay a civil penalty of \$741,000 to resolve alleged Clean Water Act violations at its construction sites, including sites located in the Chesapeake Bay Watershed. Toll Brothers will also invest in a company-wide stormwater compliance program to improve employee training and increase management oversight at all current and future residential construction sites across the nation.

The government's complaint alleged 600 Clean Water Act violations, the majority of which involved Toll Brothers' repeated failures to comply with permit requirements at its construction sites, including requirements to install and maintain adequate stormwater pollution controls, such as silt fences, phased site grading and sediment basins. Polluted stormwater runoff and sediment from construction sites can flow directly into the nearest waterway, affecting drinking water quality and damaging valuable aquatic habitats.

This settlement is the latest in a series of enforcement actions to address stormwater violations from residential construction sites around the country, and includes Toll Brothers sites in Arizona, California, Colorado, Connecticut, Delaware, Florida, Georgia, Illinois, Maryland, Massachusetts, Michigan, Minnesota, New Jersey, New York, North Carolina, Nevada, Ohio, Pennsylvania, Rhode Island, South Carolina, Texas, Virginia and West Virginia.

The consent decree is subject to a 30-day public comment period and approval by the court, and can be viewed at: http://www.epa.gov/compliance/resources/cases/civil/cwa/tollbrothers.html.

VII. Conclusion

From voluntary programs and collaboration with stakeholders, to science, remediation, regulation and enforcement, EPA continues to employ a variety of tools in its work to protect and restore America's public health and

environment. For more information on the issues, science and law behind the agency's work, visit www.epa.gov, and to keep up with more local developments, visit Region 2's website, at: http://www.epa.gov/aboutepa/region2.html. You can also sign up for our various list-serves, podcasts, mobile apps, etc at: www.epa.gov/epa-home/socialmedia.html.

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Marla E. Wieder is an Assistant Regional Counsel with the United States Environmental Protection Agency, Region 2, New York/Caribbean Superfund Program; Chris Saporita is Assistant Regional Counsel with the Water and General Law Branch; and Joe Siegel is an Assistant Regional Counsel with the Air Branch and an Alternative Dispute Resolution Specialist.

2012 President's Section Diversity Challenge

The New York State Bar Association President's Section Diversity Challenge: In 2011, NYSBA President Vincent E. Doyle III challenged NYSBA Sections to develop and execute initiatives to increase the diversity of their membership, leadership and programs, and to evaluate the results. The Committees on Membership and Diversity and Inclusion were tasked with coordinating the initiative. The Challenge began in June 2011 and concluded in March 2012.

Environmental Law Section Awarded

1st Place—Section Diversity Leaders



Carl Howard (back row-Center), Environmental Law Section Chair, at the May 10, 2012 Section Leaders Conference where the Environmental Law Section was selected as one of the "Section Diversity Champions"



Working Together, Everything Fits





Section Activities and Meetings

The 2012 Environmental Law Section Fall Meeting Lake Placid, NY October 12-14, 2012

By Michael J. Lesser Section Secretary

A patina of new snow covered the Adirondack peaks surrounding Lake Placid as over one hundred Section members and participants gathered for the Environmental Law Section's annual Fall



Professor Nicholas A. Robinson, Professor Philip Weinberg, Kenneth R. Hamm, Esq., NYS DEC, Office of General Counsel (Lands and Forest), and Neil Woodworth, Adirondack Mountain Club, present on the topic NYS Constitutional Law Issues—Forest Preserve and Forever Wild

Meeting. The meeting was held at the Crowne Plaza Resort and marked the Section meeting's formal return to the North Country after an absence of several years. Befitting the striking natural beauty of the Adirondacks, most of the substantive topics of the meeting dealt with the land use and environmental impacts affecting the largest park area east of the Mississippi.

This theme was driven home by the first panel discussion on Friday regarding the importance of conservation easements in complex Adirondack land transactions. The panelists entered into a lively discussion that raised both the advantages and drawbacks of this land preservation tool

including such diverse issues as enforcement, property taxes and wildlife habitat.

This presentation was followed by a panel devoted to the procedures and practice problems connected to the Adirondack Park Agency Hearing Process. In addition to a review of the current adjudicatory process, issues such as the reluctance of government to use the hearing process, the need for regulatory and legislative reform, rules of evidence, privilege, FOIL and witness presentation were raised and vetted.



Carl Howard, Chair, NYSBA Environmental Law Section

The final substantive panel of the Friday session was entitled "The Future of Environmental Regulations in the Adirondack Park." This panel featured a presentation by legal representatives of four of the major environmental agencies with jurisdiction over the Park. Included were distinguished counsels for the Hudson-Black River Regulating District, the Adirondack Park Agency, and the Regional Attorneys for NYSDEC Regions 5 and 6. In addition to a general review of the regulatory procedures and current events within each agency, the panelists tackled some tough issues. These included internal budget limitations, new land management regulations, and fledgling efforts to coordinate NYSDEC and APA permit procedures.

Saturday morning's presentations continued the theme of Adirondack land use with sessions entitled "Environmental Protection and Rural Economic Development within the Blue Line" and "NYS Constitutional Law Issues—Forest Preserve and Forever Wild." These panels focused on the related legal dilemmas of balancing reasonable economic development and preserving the wilderness quality of this unique region.

The first panel included four of the Adirondack's most prominent policy makers:

- Leilani Crafts Ulrich, Chair of the Adirondack Park Agency;
- Brian Houseal. Executive Director of the Adirondack Council:
- Robert Stegemann, the Regional Director of NYSDEC Region 5;
- Judy Drabicki, Esq., the Regional Director of NYSDEC Region 6.

The second panel involved a review and discussion of Article 14 of the N.Y.S. Constitution and how this crucial section of the state constitution has evolved to preserve the Adirondack Park despite numer-

ous legal challenges and disputes since its passage in 1894.



Dinner Speaker Brian Houseal, Council, Elizabethtown, NY

Finally, Sunday morning's session reviewed recent procedural developments in the State Environmental Quality Review Act, or SEQRA, such as the introduction of a new environmental assessment form ("EAF") and the improvements and changes in relation to the old formats.

The Fall Meeting was also distinguished by the appearance of three prominent guest speakers. On Friday night, acclaimed author and activist Bill McKibben addressed the Section and guests on the vital issues surrounding climate change and the nega-Executive Director, Adirondack tive impact attributed to the continued use of fossil fuels. On Saturday evening, Brian

Houseal of the Adirondack Council spoke on the complexities and difficulties caused by the overlapping and redundant state agencies overseeing development and environmental stewardship in the Adirondacks. The Section was also graced by an appearance and remarks by Andrew Brown, Esq., representing the Executive Board of the New York State Bar fessor William R. Ginsberg Memo-Association.



Miriam Villani, Chair of the Prorial Essay Contest, presents second-place essay contest winner Patrick Siler with a certificate.

The eventful weekend was concluded on Sunday morning with a substantive Section Executive Committee Meeting attended by approximately thirty Section members.

Great credit for the success of the Fall Meeting must go to the event Chair Terresa M. Bakner, Environmental Law Section Chair Carl R. Howard, and the Section's able NYSBA administrative assistants Lisa Bataille and Lori Nicoll, as well as the many speakers and moderators who gave so generously of their time. Given the substance of the Meeting and the renewal of many old friendships, the Section membership will look forward to a return to the Adirondack area.

Michael J. Lesser, Esq. is the 2012-13 Secretary of the NYSBA Environmental Law Section and is currently Of Counsel to Sive, Paget & Riesel, PC in Albany and NYC.

Committee Report

Agriculture and Rural Issues Committee

In 2013 the Agricultural and Rural Issues Committee intends to continue the format it has successfully followed in previous years by holding periodic conference calls to exchange information among its members concerning current environmental issues affecting the agricultural community, in general, and those encountered in members' individual practices. Additionally, the Committee intends to continue its practice, established several years ago at the initiative of Co-Chair Ruth Moore, of conducting an annual panel discussion of select current agricultural environmental issues in a conference call format hosted by representatives of governmental agencies, public interest organizations and private practice attorneys.

Looking further into the future, the Committee would like approval of the Section leadership to host a Fall Meeting at Cornell University, similar to one which the Section held at Cornell several years ago. Our proposal would be to enlist the support of the College of Agriculture and Life Sciences to provide faculty members as speakers on environmentally related topics.

Finally, the Committee is always interested in expanding its membership and will continue to actively solicit new members during the coming year.

Peter G. Ruppar Co-Chair

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Member Profiles

Long-Time Member: Daniel Riesel

For this issue we have focused our Long-Time Member Profile on Daniel Riesel, who has been a leader in the field of environmental law since before there was a field of environmental law. Dan has been



consistently rated among the top environmental litigators, and has been referred to as a "senior statesman" and a "Dean" of the environmental bar. In addition to being an active litigator and advisor, he is a teacher of environmental law. His teaching is varied, ranging from teaching EPA enforcement lawyers during the Carter administration on how to try cases, to serving as an adjunct professor at Cardozo Law School and, since 1995, a member of the Adjunct Faculty at Columbia Law School. His teaching also includes lecturing and chairing numerous CLE courses, including ALI-ABA's Environmental Litigation course, which he has chaired for the last 25 years.

Dan's intended career as a labor lawyer was cut short by the Air Force, in which he served as a Judge Advocate. Subsequently, his love for outdoor sports led him into environmental law which started while he was an Assistant U.S. Attorney in the Southern District of New York. There. in 1970, he was instrumental in forming the first Environmental Protection unit in any federal prosecutor's office, and led that group as its chief until 1973. During that time, the unit resurrected the Rivers and Harbors Appropriation Act of 1899 (the "Refuse Act"), a statute that was originally designed to protect navigation, and applied it to direct dischargers to the Hudson River basin, obtaining numerous indictments and civil injunctive relief. Dan notes "we thought we had cleaned up the Hudson but we didn't even know how to spell 'polychlorinated biphenvls.'"

In 1973, he joined the firm that is now known as Sive, Paget & Riesel, which was at that time led by David Sive, who had already gained significant recognition as a powerful influence in New York environmental law.

Dan has handled a wide variety of litigations, including several ground-breaking environmental litigations. For example, he recently set aside Corps of Engineer practices that limited the development of farmland. Similarly, his litigation has helped define the scope of citizen's suits, and expanded the definition of the Innocent Landowner exception to CERCLA liability. His litigation activity has extended beyond environmental matters due to the broad diversity of his clients that have produced labor, zoning, and commercial matters in addition to the array of environmental matters. Those clients include the Hudson

River Sloop Clearwater, a large number of industrial and development clients, Yeshiva University, and the Commonwealth of Puerto Rico. He says that one of his favorite clients is his hometown, the Town of Cortlandt. Cortlandt has been in the center of development and its representation has led to numerous land use battles, including the successful defense of the Town in a year-long regulatory taking trial.

The nature of the environmental litigation he has undertaken is as varied as are his clients, running from large CERCLA matters, toxic torts, zoning disputes and criminal defense. Dan singled out his criminal defense work as one of the more challenging aspects of his practice, noting that criminal defense in the environmental field usually means you are representing someone who is having his or her first experience with the criminal justice system. Although known as a litigator, Dan is proud of his development work noting that he was the environmental lawyer on the largest brownfield development in Manhattan, nine acres along the East River.

Dan is known for his creativity, and when asked about current matters, he spoke about expanding the reach of the Supreme Court's recent holding in Sackett v. EPA to the DEC's use of Notices of Violation, which it contends cannot be judicially reviewed until DEC eventually concludes its enforcement action. My inquiry led to Dan's observation that between the clamor for deregulation and the competing demands for a clean environment, the need for fundamental fairness and some semblance of due process for members of the regulated community has often been overlooked. In addition to the DEC's NOV practice, he singles out EPA's use of Section 106 of CERCLA. In most of these cases, EPA has authority to obtain a judicial injunction to abate an imminent and substantial endangerment, but knowing it would face difficulties in proving its case, it regularly chooses to issue unilateral orders. Most parties cannot risk the draconian penalties for ignoring such an order, and the real consequences are, in Dan's opinion, that EPA avoids having to engage in meaningful analysis of risk and liability.

Dan is also known for his writing. He authored *Environmental Enforcement, Civil and Criminal*, published by the Law Journal Press. It is the only book that integrates all aspects of civil and criminal enforcement; continually updated, it is an authoritative guide through the regulatory maze. He has published a wide variety of formats from law reviews to practice guides, and estimates that he has approximately 50 published articles.

Dan has held numerous leadership roles in the legal community, including chair of this Section and chair of the Committee on Environmental Law of the Bar of the City of New York. He is a fellow of the American College of Environmental Law.

A unifying theme that runs through Dan's practice, as he describes it, is the environmental lawyer's need to discern objective fact from questionable scientific conclusions and half-baked administrative actions. Dan believes good lawyering will allow us to tackle the major environmental issues such as climate change and resource depletion.

Aaron Gershonowitz

New Members: Megan Brillault and Kristen Wilson

For this issue's New Member Profile, we are breaking the mold and introducing two young environmental



Megan Brillault

lawyers in tandem: Megan Brillault and Kristen Wilson. These two eco-warriors met at Pace Law School while collaborating to represent fisherman petitioners through Pace's environmental litigation clinic in the well-known Esopus Creek trial. The litigation ultimately required New York State to obtain a state permit for discharges associated with the Shandaken Tunnel Portal, which had

the effect of increasing the turbidity and temperature of the Esopus. Thankfully, this was just the beginning of two very impressive and undoubtedly prolific careers in environmental law.

Both Megan and Kristen have made significant contributions to the Environmental Law Section. As co-chairs of the Committee on Pollution Prevention, they have been working with our Chair, Carl Howard, to reduce the environmental impact of the practice of law. Using a carefully crafted survey, they created an emerging "law office climate challenge." A similar effort already exists under an EPA-ABA partnership, but until now none had focused on law firms in New York. The Challenge delineates four tiers of law firm "greenness," and to date 50 firms have met at least one of the Challenge's tiers. Kristen reassured

me that 50 is not enough and now they have their sights set on enrolling 100 law firms in the Challenge. Maybe *your* law firm will be next! The effect of the Challenge is alchemistic—it turns words and ideas into action, and turns actions into results. I think we can all get on board with best practices that reduce paper, water, and energy use, while saving money and creating environmental benefits. Megan and Kristen also authored a guide, "Greening the New York Legal Profession—Encouraging a More Sustainable Practice," which appeared in an earlier issue of *The New York Environmental Lawyer*. Megan truly lives by these guidelines, and has been known to leave Postits on a co-worker's lamp if a light is left on. Kristen has presented at NYSBA Annual Meetings and CLEs, and also sits on the Panel for New Lawyers.

Currently both Kristen and Megan are in private practice, respectively at Harris Beach's White Plains office and Beverage and Diamond's New York office. Kristen practices environmental, land use, construction, and municipal law and litigation, among other practice areas. She represents municipalities in state and federal litigation concerning the Religious Land Use and Institutionalized Persons Act of 2000 (RLUIPA), and is constantly surveying the landscape for new legal developments. She commented that RLUIPA is very likely to eventually find itself under the scrutiny of the United States Supreme Court. Noting that land use law is a hot topic in Westchester, Kristen explained the struggles the county is having implementing the Affirmative Fair Housing Marketing Plan, which resulted from a settlement agreement between the U.S. Department of Housing and Urban Development and former County Executive Andrew J. Spano.

Megan works in Beverage and Diamond's environmental litigation, toxic tort and product liability, environmental, and litigation practice areas. Among other matters she is involved with historic railroad sites that fall under Superfund regulations due to the presence of PCBs and other contaminants. Megan also represented the electronics industry in its effort to establish statewide "e-recycling" programs, which are increasingly important as technology advances exponentially.

The Section is lucky to have as members two such dedicated and bright young lawyers.

Justin Birzon



David J. Freeman recently joined Gibbons P.C. after a long and successful tenure at Paul Hastings LLP. Dave represents property buyers, sellers, and developers in all areas of environmental law, with a particular emphasis on brownfield redevelopment projects. He also represents parties in Superfund and hazardous waste cleanup cost recovery litigation. Dave received a 2012 Burton Award for Legal Achievement for his work as an outstanding law firm author. He currently serves as President of the New York City Brownfield Partnership; Vice Chair of the Board of Trustees for the New York League of Conservation Voters Education Fund; and as Co-Chair of the Hazardous Waste/Site Remediation Committee and Co-Chair of the Brownfields Task Force of this Section.

Joan Leary Matthews recently left her position at NYSDEC and became Director, Clean Water Division, United States Environmental Protection Agency, Region 2.

Eileen Millett was invited to join the American College of Environmental Lawyers (ACOEL). She is also a member of the Environmental Law Advisory Panel of what was formerly known as ALI-ABA and is not ALI-CLE. Also, Eileen's article on climate change, *D.C. Circuit Decision Could Determine Reach of EPA Greenhouse Gas Rules*, was published in Bloomberg BNA Daily Environment Report, June 21, 2012.

Howard Tollin recently joined Sterling Environmental Services of Woodbury, NY, as President and Managing Director.

As of December 1, 2011, **Daniele Cervino** is a partner in the law firm of Golub & Isabel, PC of Parsippany, NJ. Prior to joining Golub & Isabel, Ms. Cervino was in-house

counsel at EWMA, an environmental consulting firm also in Parsippany.

Sonali Chitre has joined Green Impresario, a new group that researches and advises on institutional frameworks for sustainable development and building resilience in communities through fostering strong civil society partnerships and transparency. Sonali also consults in the areas of sustainability, strategic management, operations, government relations, and emerging markets. Previously, Sonali worked with Islands First, a nonprofit organization that serves the Pacific Islands by providing council on environmental and energy law and policy.

Erica Levine Powers, an adjunct faculty member in the Department of Geography and Planning at the University at Albany (SUNY), teaches Planning Law and Environmental Planning/Law in the Masters in Regional Planning Program. She recently published an article, Home Rule Meets State Regulation: Reflections on High Volume Hydraulic Fracturing for Natural Gas, in ABA State and Local Government Law Section, State & Local News, vol. 35, no. 2 (Winter 2012). Ms. Levine Powers was Moderator of "When Fracking Comes to a Community Near You: An Ounce of Land Use Planning Is Worth a Pound of Cure," a CLE program of the ABA State and Local Government Law Section at the ABA's Mid-Year Meeting, February 2, 2012 in New Orleans. That program was reprised as an ABA live CLE webinar/teleconference on March 7, 2012.

On January 1, 2012, **Richard Tobe** was appointed Deputy County Executive by then-incoming Erie County Executive Mark C. Poloncarz.

Errata:

Charles S. Warren, Environmental Honoree

The Member News column in the last issue of *The New York Environmental Lawyer* noted that Parks & Trails New York, a leading statewide nonprofit advocacy organization, had recently honored 23 individuals as New York's Pioneers of Environmental Law, 18 of whom are members of our Section. Unfortunately, the list of honorees we received inadvertently omitted Charles S. Warren of Kramer Levin Naftalis & Frankel LLP. We regret that omission: Mr. Warren was one of PTNY's honorees and is well known as a distinguished pioneer of environmental law.

In Memoriam Alice J. Kryzan (1948-2012)

Alice was born on July 19, 1948, in Youngstown, OH, one of two children of Carolyn and Judge Frank X. Kryzan (former Mayor of Youngstown). Alice lost a hard-fought battle with esophageal cancer on June, 2, 2012. She was known for her extraordinary commitment to public service, wonderful sense of humor, keen intellect, determination, integrity, leadership and devotion to family and friends.

Alice graduated from Ursuline High School in Youngstown in 1966. She received her B.A. from Trinity University in Washington, DC, in 1970. In 1973, she received her J.D. from the University of Chicago Law School, where she was one of only twenty women in her graduating class. At the University of Chicago she met her husband of 40 years, Robert Berger, now emeritus Professor of Law at the State University of Buffalo Law School.



After graduating from law school, Alice worked at a small law firm and then at the Chicago Lawyers' Committee for Civil Rights Under Law. She moved to Amherst, NY in 1978, and joined Phillips Lytle, where she became the first woman partner at what was then the largest law firm in Buffalo. She went on to manage the Buffalo office of Whiteman, Osterman, and Hanna, and after leaving that firm, Alice continued to practice environmental law before retiring in 2005.

In 2008, Alice was the Democratic congressional candidate from New York's 26th District, after winning a hard-fought three-way primary. Alice also was the Democratic candidate for Amherst Town Supervisor in 2009.

Alice had a distinguished record of community service. We were fortunate to have Alice serve in several officer positions and then as Chair of the New York State Bar Association Environmental Law Section (1997-1998). She remained an active member of the Section Council until her recent death. She also chaired the Erie County Bar Association Environmental Law Committee. A lifelong environmentalist, Alice served as a Board Member of Parks & Trails New York, and in 2011 was one of the recipients of PTNY's Environmental Law Pioneer Award. She was also the Chair of the Board of Planned Parenthood of Buffalo and Erie County (1998–2000), served on the Steering Committee and was Treasurer of The Women's TAP (Taking Action Politically) Fund, and was on the Board of The Western New York Women's Fund.

We have lost a wonderful, loving, and supportive friend and colleague.

To honor Alice's memory, her husband Bob, son Sam, and other family members, friends and colleagues will help fund the development of the Alice Kryzan Library planned by the Girls Education Collaborative (www. girlsedcollaborative.org) to be part of a school campus for the education of girls in a rural community in Tanzania. The Alice Kryzan Library will be the first of the school buildings to be constructed in an environmentally friendly manner and will serve as the model for future school buildings. The school will be run by the Immaculate Heart Sisters of Africa. The Alice Kryzan Library will serve as the embodiment of three of Alice's most important passions: the environment, education, and the empowerment of girls and young women. It is hoped that a trip to Tanzania for the groundbreaking of the Alice Kryzan Library will be planned.

The Section is making a contribution to help make the Alice Kryzan Library a reality. All interested members should feel free to make individual contributions to: Girls Education Collaborative, P.O. Box 2191, Buffalo, NY 14231.

Gail Port

Book Review

Greening Local Government, Eds., Keith H. Hirokawa & Patricia E. Salkin

Reviewed by Andrew B. Wilson

sum of its parts. This, by no small

accident, is also one of the strong

Greening Local Government is a guidebook edited by Keith Hirokawa and Patricia Salkin that should be required reading for public officials ranging from Planners to County Executives to Senators—and is highly recommended for everyone else. This assemblage of authors, skilled in their many respective fields, provides key insights into the process of integrating sustainability into government. While readers can pick and choose chapters, which generally fall into the twenty page range from the 423 pages of content, the interconnectedness of the ideas makes for a whole greater than the

themes to be found in this book as Hirokawa and Salkin walk the reader through issues related to the broad topics of greening government operations, creating green communities, and then models of successes as well as litigation tools.

In crafting this American Bar Association book, Hiro-kawa and Salkin enlist an accomplished group of authors, many of whom I (and probably the majority of the readership of *The New York Environmental Lawyer*) know and hold in high regard. Indeed, I know Professor Salkin personally and would like to congratulate her on her new position as Dean at Touro Law Center.

The best argument for this book as an effective guide can be found in the bulk of Section Two, which addresses how to create green communities. These chapters give tangible ideas, models, and then a frank analysis of strengths and weaknesses. A government official interested in building and integrating sustainable communities can turn to this section for an analysis of "How To" and "Here's What To Look For." If there is an interest in green building codes, Howe will show you how Chicago and Boston have worked in strong building codes and yet avoided pitfalls such as nondelegation. Silverman and Denzin describe how to use Charrettes (read the chapter) to help lead transit-oriented development as an overlay district. Art von Lehe describes methods of addressing waste management such as Pay as You Throw, pioneered as early as 1944 in Spokane, Washington, and how it can lead to job creation (the astounding statistic that the recycling sector "account[ed] for 2 percent of 2007's gross domestic product"). Reinhardt addresses the monumental challenges of green energy generation and transmission. Owley describes conservation easements while urging caution in their use. Kibert and Hirokawa in their respective chapters address stormwater plans and urban forests as sound fiscal and sustainable investments. And to round it out. Emerson gives an excellent overview of Development Codes as Lucero and Burleson confront social equalities through integration of Climate Justice and working in partnership with Tribes. My one caution is that in resetting the stage

between chapters there is some duplication of content, but that is the price of having chapters that also stand alone.

While the ideas proffered in the second section of the book are excellent for those on the state and local level looking for inspiration, parts three and four take these ideas and put them in to some context. Part three will be of interest to the legal team working on these projects as it covers case law and some context on federalism and how local governments can be on strong footing to explore these options. The authors in this section also delve into litigation tools to enforce nuisance claims,

novel use of law to address modern environmental issues, and accountability for projects that make big promises. In part four, the audience is reunited to see some of these plans in action through examples of successes. Successes, for example, that implemented tools such as prescriptive codes, which "identify what the jurisdiction wants to build rather than what it does not," and how to effectively engage community involvement. Particularly, post-Katrina New Orleans and the City of Miami are held out as examples from which local government leaders can pull ideas.

Greening Local Government had me hooked in the first hundred pages, and truly reinvigorated me and how I look at the power of local government. It reminded me that much of the environmental movement in the last twenty or so years has been driven at the local level. Even now, look at New York's fight over whether municipalities decide whether to hydrofrack. This critical debate hinges on the land use power of local government, a key discussion in this book. Further, the federal government has actively been shrugging off its environmental decision making and allocating it to the respective States and localities. From inside these local administrations is where we see sustainable innovations and successes coming.

This message of the power of local governments should resonate with a range of readers; hopefully it rings the strongest with the local governments themselves, but also with practitioners, community groups, and even job seekers interested in working for positive environmental change. Many job seekers during this age of issue polarization may find the strongest positions for change are not in big name think tanks or firms, but in those voices for sustainability that can gently nudge green policies and projects from inside governments. As Lang points out, "most green initiatives in their counties originate from staff." This is where efforts are needed as many governments are politically barred from taking even sound advice from environmental groups, even if they may secretly agree. Maybe the nudge from inside can be as gentle as adding a copy of Greening Local Government to the procurement plan, which I recommend everyone do, even if that plan is as local as your household.

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AUTHORS

Michael E. Cusack, Esq.

Young, Sommer, Ward, Ritzenberg, Baker & Moore LLC Albany, NY

John P. Stockli, Jr., Esq. Stockli Greene Slevin & Peters, LLP Albany, NY

Herbert A. Kline, Esq. Coughlin & Gerhart, LLP Binghamton, NY

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The Illusion of the Blue Flame: Water Law and Unconventional Gas Drilling in New York State

By Anne Marie Garti

I. Introduction

For years natural gas has been touted as a clean burning fuel that could serve as the transition from coal to renewables. The association of gas with clean heat became iconic, as can be seen in the ubiquitous blue flame that appears in ads, logos, trademarks, and other promotional materials. However, the public policy of using natural gas as a transitional fuel developed at a time when it was found in reservoirs, and could be easily pumped out of the porous rock formations where it had accumulated.² Since then, conventional gas supplies have peaked, and there are no new major reservoirs of methane to be found in the United States.³ Instead, the natural gas industry is now extracting gas from tiny cracks in otherwise solid rock located as much as a mile or more beneath the earth's surface.4 This unconventional form of gas drilling is referred to as high-volume hydraulic fracturing (HVHF), but is more commonly known as "fracking." As the name implies, the process requires large quantities of water to release particles of methane trapped in tiny spaces of rock. The technique has inextricably entwined water use with energy creation, and has led to a litany of unintended consequences.

The transition from conventional to unconventional gas drilling mainly took place in industry friendly and rural areas of the United States, where the impacts could be dismissed as either nonexistent or necessary to keep the fuel flowing to the rest of the nation. This out-of-sight/out-of-mind scenario came to an abrupt end when the oil and gas industry targeted the Marcellus shale in New York State. There the companies stepped on the proverbial hornet's nest, and were quickly surrounded by a swarm of citizens who were determined to drive them away.

In July 2008, citizens of New York State were given an opportunity to learn about fracking—and affect its outcome-when then-Governor David Paterson decided to supplement a sixteen-year-old Generic Environmental Impact Statement on the Oil, Gas and Solution Mining Regulatory Program (1992 GEIS) to counterbalance an industry-friendly statute on spacing units for gas drilling that he was signing into law. The New York State Department of Environmental Conservation (DEC) issued a draft scope of work for a supplemental impact statement later that year.⁸ Public comments on both the scope of work and the first Draft Supplemental Generic Environmental Impact Statement (DGEIS) called for studies on almost all of the social and natural resources in the state, including water supplies, air, food, public health, socio-economic development, wildlife, and forests. 9 This

article will focus on a subset of those issues, namely the relationship between unconventional natural gas drilling and water law in New York.¹⁰

While nothing has been firmly decided over the past four years, much has changed. Most significantly, the oil and gas industry can no longer rely upon the iconic image of natural gas as a clean blue flame. The public is now more likely to associate natural gas drilling with either faucets that catch on fire or brown water that flows out of the tap. 11 Many citizens have come to understand that unconventional gas drilling is just an extreme—maybe even desperate—form of fossil fuel extraction, and no amount of regulation will make it safe. They show a decided unwillingness to exchange their clean air, water, and health for energy.¹² And their view is supported by science.¹³ While citizens ask their leaders to pursue other solutions. such action is not forthcoming; public policy and the law have simply failed to keep pace with the rapidly evolving realities of this resource war.¹⁴ Therefore, no matter what is decided in New York State, the power struggle between clean water and fossil fuels is likely to play out in a more violent fashion elsewhere as the need for energy intensifies around the world, potentially threatening large portions of the global water supply. 15

II. Peak Gas and High-Volume Hydraulic Fracturing

A. Conventional Gas Drilling

Understanding the relationship between water and gas drilling requires a basic knowledge of geology, hydrology, and fossil fuel extraction. Many of the fundamental facts about New York State's geology can be found in DEC's 1988 draft GEIS, and high-volume hydraulic fracturing (HVHF) is described in the DEC's 2011 revised DSGEIS. However, an analysis of the cumulative impacts of a full build-out of gas wells is missing from the current study. It takes an active imagination to convert the 1,537 pages of words, graphics, and charts into a mental model that expresses the changes gas drilling may bring. Subsurface geology gives shape to that model, so we need to become familiar with what lies below our feet.

Over 400 million years ago, a shallow ocean spread across the area now defined as Appalachia. ¹⁷ Dead organisms and other debris fell to the bottom, forming sedimentary deposits that are now miles thick. ¹⁸ Bacteria decomposed some of the organic matter, which was also compressed, heated, and subjected to lifting, faulting, folding, and tectonic collisions. Some of the petroleum products that we now covet as a source of energy rose up

through these deposits to collect in porous sandstones, trapped by a cap of low permeable shales. ¹⁹ Oil and gas also seeped to the surface of the earth and were used by Native Americans and early settlers. ²⁰ Fredonia, New York was the site of the first gas producing well in the nation and since then, reservoirs of trapped gas have been drilled in western New York State. ²¹

Compared to the new techniques, these conventional gas wells are comparatively benign. Basically a hole is drilled down to the reservoir of gas, and the hydrocarbons are either pumped up or flow naturally from internal pressure. ²² However, by 1970 the oil and gas industry was having difficulty finding new reservoirs of gas. ²³ Production flattened, and in response the government worked with industry to develop new techniques to extract gas from tight shales, thereby giving birth to unconventional gas drilling. ²⁴

B. Invention Is the Mother of Necessity

Modern society has let itself become almost completely dependent on fossil fuels for its survival, even though there are many other potential sources of energy. Much of our infrastructure for transportation, heat, and electricity is tied to fossil fuels, and the industry that extracts and sells it may be the most powerful in the world, which makes switching energy sources politically difficult.²⁵ Therefore, when the federal government saw that there were no new reservoirs of natural gas, it led the effort to extract it from the tiny pores of black shales. These formations are the source of the methane that has been accumulating in the sandstones for tens of millions of years—to be summarily depleted by modern man in a couple hundred years.²⁶ To tap the shale gas, the federal government tried detonating nuclear bombs to fracture it, but those attempts made the gas radioactive.²⁷ Undeterred, the Atomic Energy Commission continued the nuclear experiments, but eventually had to stop.²⁸

Next, the federal government partnered with private industry to develop what is now being promoted as a technological breakthrough. However, an understanding of exactly what is required to frack a well calls that description into question.²⁹ Releasing gas from tight shales using HVHF with horizontal well bores requires a number of steps. In essence, a vertical hole is drilled, the drill bit is removed, the hole is lined with steel tubing, and then cement is forced between the steel and the earth in an effort to create a seal tight enough to stop methane and other chemicals from migrating into water supplies or up to the earth's surface.³⁰ The vertical drilling continues down, and then the drill is angled until it moves horizontally through the middle of the targeted shale.³¹ Finally, in stages starting at the furthest point from the well pad, millions of gallons of water—mixed with sand and chemicals—are blasted through the holes at a pressure high enough to fracture rock a mile beneath the earth's

surface.³² Although there are no bombs involved, fracking requires an explosive force that is powered by a dense chain of equipment on the surface.³³ Depending upon the depth of the borehole and the length of the horizontal pipe, anywhere from two to eight million gallons of water can be used to frack a well.³⁴ Added to this water is sand, which is used to hold open the pores, and a concoction of toxic chemicals.³⁵

Drilling and fracking generate vast amounts of waste, which comes back to the surface as drilling fluids, cuttings, flowback water, and produced water. Since Marcellus shale is radioactive, so are the cuttings, water and gas that emerge.³⁶ It is anticipated, based on data from Pennsylvania, that nine to 35 percent of the fracking water will flow back to the surface, along with the chemicals that were added to it.³⁷ In addition, the produced water, which returns with the gas, must be separated and disposed of, either through an industrial treatment plant or an injection well.³⁸ This produced water, or brine, is extremely salty and includes an assortment of heavy metals and hydrocarbons.³⁹ All of the waste needs to be trucked out of the site, and in many cases out of the state, so there is a risk of accidents and spills all along those routes. Finally, there is the possibility of migration of methane, vapors, fracking fluids, and brine through natural and manmade conduits into aquifers and up to the earth's surface.40

While the federal government and industry developed techniques to release the gas that is trapped in the pores of tight shales, they failed to study potential negative consequences. Instead the technology was promoted as an advancement and innovation. The shale "plays" were touted as a "discovery" of vast new reserves of domestic natural gas, and experts who dared question this rosy picture had their articles pulled. True to its Wild West heritage of "shoot first, ask questions later," the federal government embraced HVHF simply because it had been invented and promised to release a vast trove of natural gas. The icon of clean energy—the blue flame of natural gas—was transferred from conventional to unconventional gas drilling without a second thought.

However, someone must have been aware of the negative impacts as the federal government systematically excluded and exempted hydrofracking from seven environmental statutes. 44 Some of these exemptions were included in the 2005 Energy Policy Act, which was passed under then-President George W. Bush and Vice President Richard B. Cheney. 45 For example, environmental reviews are to be expedited when gas drilling or transmission lines are sited on federal land. 46 In a similar fashion, the 2005 Energy Policy Act exempted the oil and gas industry from having to comply with the underground injection provisions in the Clean Water Act and the Safe Drinking Water Act. 47

C. Cumulative Impacts of Unconventional Gas Drilling

To understand why 70 percent of residents in affected counties in New York State oppose fracking, one must imagine exactly what is entailed to put a shale well into production, and then extend and compound that volume of activity over space and time to generate a mental model of the impact of the tens of thousands of gas wells needed to achieve the projected production.⁴⁸ There is no easy comparison to assist in generating this mental map; the size and scope of industrial activity this generic environmental review will enable is unprecedented in New York State. However, a statement in a report to the U.S. Energy Information Administration on the 750 trillion cubic feet of shale oil and gas then estimated to exist in the United States might help: "In order to realize this production, substantial drilling is required. As the effective lifespan of the shale gas wells is relatively short, new wells are required to maintain current production levels as well as increase them."49

New York State applies different standards for the various drilling techniques and formations.⁵⁰ Therefore each combination must be individually assessed and layered on top of another in order to comprehend the potential density of a complete build-out of gas wells. According to the state's spacing law, a multi-acre well pad will be permitted every square mile for horizontal drilling in a specific shale formation.⁵¹ Depending on the size, shape, and topography of the unit, it is possible that one to 16 horizontal gas wells will be drilled and fracked per square mile.⁵² In addition, vertical infill wells, based on a 40-acre spacing unit, may be permitted within this same square mile in order to extract gas from areas the horizontal drilling could not reach.⁵³ A standard DEC permit will require all wells within a spacing unit to be drilled within three years.⁵⁴ However, because gas production tends to drop off precipitously in tight shales, each of these wells may have to be refracked to keep the gas flowing, potentially making each well pad a continuous site of industrial activity.55

More significantly, New York State has multiple formations of low permeable shales that can be productively tapped, with the Marcellus and Utica being the most extensive. For This means that two companies could each have a well pad on all, or a portion, of the same 640-acre spacing unit, with one company targeting the Marcellus and the other targeting the Utica. In addition to the tight shales, there are conventional formations, such as the Trenton Black River and Herkimer, with distinct spacing units, that can also be drilled within the same surface area. Therefore, in many areas of the state, this generic state-wide environmental review of HVHF, which will coexist with the 1992 GEIS, will theoretically enable many distinct well pads to be permitted per square mile.

When calculating the cumulative impact, in addition to the number of wells, one must also factor in the amount of land disturbed, and the impact of the activity associated with bringing each well into production.⁵⁹ The natural gas industry estimates that the average size of a typical HVHF well pad will be 3.5 acres. 60 Some well sites will have ponds for the storage of fresh water or the flow back of drill cutting fluids. 61 Each pad will also require an access road and pipelines for gathering the gas for distribution.⁶² DEC has estimated that it will take 3,959 heavy truck trips, and 2,840 light truck trips to frack one horizontal gas well using HVHF.⁶³ These trucks will be needed to prepare the access roads, well pads, and ponds; deliver the rig, pipes, water and chemicals needed to frack a well; and remove all of the waste products. The drilling and fracking process will take place 24 hours a day, seven days a week, accompanied by high intensity lights and sound.64

New York has about 28,500 square miles of Utica shale and 18,700 square miles of Marcellus shale beneath its surface, and the two formations overlap each other in the southern half of the state. ⁶⁵ In addition, there are layers of sandstones, and other formations, that may contain gas that will be drilled in the future. It is only when gas wells for all of these overlapping formations get added together, with the total maximum number of trucks, water, chemicals, lights, sounds, spills, and vapors, that the true picture of what could happen as a result of this generic environmental review begins to emerge. ⁶⁶

III. Resource Wars: The Collision of Water and Energy, and the Politics of Who Gets Gas Versus Who Gets "Fracked"

There have always been people who have paid the price for the extraction of fossil fuels. ⁶⁷ In many ways the situation that is proposed for New York State, in regards to gas drilling, is similar to what has been taking place around the globe. However, in New York, the drilling, selling, and consumption of the fossil fuel will be happening in close proximity. Suddenly, we, or our neighbors, are the ones who are being threatened by the ill health and environmental degradation of fossil fuel extraction, making it harder for us to hide from the consequences of our energy consumption. ⁶⁸

Every gas well using HVHF with horizontal drilling contaminates millions of gallons of pure water. This puts direct pressure on the quantity and quality of fresh water available for all other uses. In addition, there is the problem of how to separate and dispose of the waste. New York State does not have facilities that are capable of removing the radioactivity, chemical compounds, heavy metals, and brine that emerge from the earth with the gas. ⁶⁹ Even if treatment facilities are constructed, fracking still has the potential to contaminate surface and ground water through spills, leaks, and effluent

discharge because of the need to transport the material from the well pads to the facility, and the impossibility of removing all of the toxins in a cost-effective manner. New York State could require the industry to distill the wastewater—a process that would be able to remove the salts. However, in that scenario, the amount of energy needed to extract the gas, and remove the contaminates, may significantly reduce the amount of energy actually obtained. Irrespective of the approach that will be taken, the concentrated toxins that are left after the water is cleaned will have to be disposed. Some states force the fracking waste back into the earth, but this practice may be causing earthquakes. Fortunately, the geology in New York is generally not suitable for injection wells.

New York State has abundant water supplies that could be contaminated by fracking. This water normally provides a habitat for countless species, and potable water for tens of millions of people. There are 17 watersheds in the state, 7,600 freshwater lakes, ponds, and reservoirs, two great lakes, and 70,000 miles of rivers and streams.⁷⁵ The Susquehanna, Chemung, and Delaware Rivers have their headwaters in the area that lies above the Marcellus and Utica shales. 76 In addition, the state has an extensive network of primary and principal aquifers.⁷⁷ Both types are considered "highly productive," but primary aquifers are those that are currently being used by a major municipal water supply system.⁷⁸ Finally, there are many dispersed springs and aquifers, which are relied on by homeowners across the state. Many of them are perched aguifers, which are usually smaller in size.⁷⁹ Perched aguifers are abundant in the state, but have not been mapped. In many instances they are located close to the surface of the earth, and are particularly vulnerable to surface disturbances and spills.⁸⁰

In the current draft SGEIS, DEC is proposing different standards for different water supplies, with the amount of protection directly correlated to the number of people dependent upon that water supply. For example, no drilling can take place within 4,000 feet of the border of watersheds of New York City and Syracuse, which have been granted filtration avoidance pursuant to the Safe Drinking Water Act. 81 However, fracking can take place within the watersheds that supply water to smaller cities, with a setback of 2,000 feet from the wells, reservoirs, or streams that supply the reservoir.⁸² For the first two years, no well pads can be located within 500 feet of a primary aquifer. 83 Placing a well pad within 500 feet of a principal aguifer or private well, or within 150 feet of a stream, lake, or pond is not forbidden; it just requires a site-specific environmental review.⁸⁴ These proposed bans, moratoria, and setbacks are proportional to the quantity of water served, with the water supplies of the most densely populated areas getting the greatest protection, and individual homeowners, and currently underutilized watersheds, getting the least amount of protection.⁸⁵ The standards are not substantiated by scientific studies, and have led many

people to believe that DEC's plan is based on political expediency, not scientific fact.

A. Water Law in New York State

In addition to DEC's proposed regulations, the gas industry's use of water in the extraction of methane from low permeable shale is subject to both common and statutory laws. These laws include tort, nuisance, riparian rights, regulatory permits for water withdrawals over 100,000 gallons, interstate compacts for the Susquehanna and Delaware River Basins, an international compact for the Great Lakes and Saint Lawrence Seaway, and the federal Clean Water Act. Finally, under DEC's proposal, the Safe Drinking Water Act will determine if a watershed is exempt from all HVHF based on its filtration avoidance status.

Since there are overlapping local, state, interstate, and federal laws, preemption is likely to be a recurring issue. This problem has already emerged as over 100 municipalities have used their land use powers to protect their citizens. ⁸⁶ Industry and landowners claim that DEC has the sole right to regulate gas drilling, while towns argue that land use laws are not regulating how the industry operates, but whether and where they can drill. To date, the courts have held for the towns. ⁸⁷

1. Riparian Rights

Riparian rights are derived from English common law and have been adopted in about 32 eastern states, including New York. A riparian parcel is land that adjoins a natural body of water, such as a river or stream, and is thereby granted a property right to use the water—along with all of the other riparian parcels.⁸⁸ Traditionally the doctrine guaranteed absolute quantity and quality of water, meaning that no riparian owner could diminish the flow of water or pollute it.89 However, over time, the doctrine was reduced to a reasonableness test, which means that a plaintiff must now only prove that the defendant unreasonably took too much water, or unreasonably polluted it. 90 Riparian use of water is limited to the watershed from which it is taken.⁹¹ If a court decides that the use, or abuse, by the defendant is unreasonable, then it can provide equitable relief by balancing, adjusting, or apportioning the uses of the other riparian owners so that all of them get enough water, or clean enough water, based upon the circumstances of the case.⁹²

2. Statutory Permits

In 2011, New York State enacted a law requiring a permit for the use of water by industry, commerce, and agriculture. ⁹³ Water withdrawals over 100,000 gallons per day now require the approval of DEC. ⁹⁴ While the bill was promoted by large environmental organizations and enjoyed strong support among legislators, it was widely opposed by grassroots organizations that oppose fracking. ⁹⁵ These groups opposed the law because they believe the gas industry should have to pay for all of the water it

uses, the law includes unnecessary loopholes, and it will result in unintended consequences. ⁹⁶ For example, gas drillers could simply hire multiple truckers to take 95,000 gallons of water per day as a way to avoid the need for a permit, and thereby get the water for free. ⁹⁷ Alternatively, the law may establish a less stringent cost and permitting standard for the Great Lakes than the Susquehanna and Delaware River Basins, thereby causing an unequal drawdown of water from those international waters. ⁹⁸

Other eastern states have been operating under a combination of common law riparian rights and a statutory permit system for some years, and this hybrid system is now referred to as regulated riparianism.⁹⁹ While the courts in each state have interpreted regulated riparianism differently, most of them now allow water to be used on non-riparian land, or even outside of the watershed from which it was drawn.¹⁰⁰ Neither of these uses would be allowed under a pure riparian system. However, these regulations were promulgated for a reason. The vast increase in population, complexity of water use, and global warming have led to the need for a unified system of regulations to protect a consistent flow of water.¹⁰¹

3. Interstate and International Compacts

New York is home to the headwaters of the Delaware and Susquehanna Rivers, both of which are governed by an interstate compact. 102 The Delaware River Basin Commission (DRBC) was created in 1961, and is comprised of the governors of New York, Pennsylvania, New Jersey, and Delaware. In addition, the North Atlantic Division Engineer of the U.S. Army Corps of Engineers serves as the federal representative. The Susquehanna River Basin Commission (SRBC) was created in 1970, and shares a similar structure as the DRBC's, except the affected states are New York, Pennsylvania, and Maryland. Both compacts call for the protection of both the quantity and quality of the water. 103 In addition, New York is a member of the Great Lakes-St. Lawrence River Basin Water Resources Compact, which also restricts water use and withdrawal out of the basin. 104

To date the DRBC has not allowed any water withdrawals from within the watershed. On a number of occasions it was poised to finalize regulations and begin issuing permits, but each time there was a flood of opposition, and the commission postponed its decision. For example, in November 2011, a meeting was cancelled after the Governor of Delaware stated he would be voting against the regulations. In addition to public comments and political pressure, there has also been legal action to protect the watershed from potential harm. New York Attorney General Eric Schneiderman sued the Army Corps of Engineers for its failure to initiate a full environmental review before allowing hydrofracking in the basin. In The federal government has since moved to dismiss the complaint.

In contrast, the SRBC has given a green light to gas drilling, and authorizes water withdrawal permits for hydrofracking at almost every meeting. 109 Since their compacts are similar, this highlights the stark difference in the politics and administration of the two commissions. For example, in July 2011 the SRBC proposed rules that would relax water withdrawal standards. 110 This resulted in public comments calling for strict protection of the water, and a cumulative analysis of the health and water impacts. 111 However, the SRBC has not been responsive, and Attorney General Schneiderman has not sued the SRBC as he did the DRBC.

4. The Clean Water Act

In 1972 Congress passed the Clean Water Act (CWA) so "that the discharge of pollutants into the navigable waters be eliminated by 1985." To achieve this lofty goal, it was mandated that "the discharge of any pollutant by any person shall be unlawful." However, not every spill or hillside runoff qualifies as a discharge because, by definition, it has to originate from a "point source." Il Injection wells associated with the oil and gas industry are specifically excluded from the definition of pollutants. In addition, the oil and gas industry is exempt from the CWA's stormwater runoff program.

Concurrent with the goal of eliminating pollution, the CWA allows a person to discharge pollution as long as he or she has a permit to do so.¹¹⁷ In most states, including New York, the state's environmental agency issues permits and enforces the CWA. 118 Therefore, the gas industry will need permits for discharging pollutants from a point source into water and for dredging and filling wetlands. 119 For example, if the industry were to build an industrial waste water treatment facility, it would need a permit to discharge the effluent. 120 This permit would specify the location of the outfall and the exact amount of toxins that could be discharged on a daily or monthly basis. 121 However, EPA has not issued effluent limitation guidelines for hydraulic fracturing fluids. 122 In a different scenario, if a drilling pad were to be located in a wetland, then a company would have to get a dredge-and-fill permit before it could proceed. 123

5. The Safe Drinking Water Act

The Safe Drinking Water Act (SDWA) was enacted to establish minimum standards for public water supplies. ¹²⁴ As amended, it mandates that surface water supplies that have at least 15 service connections, or regularly serve at least 25 people for 60 days of the year, be filtered. ¹²⁵ The required treatment is directly based on the quality of the source water. Systems with fewer connections, or users, do not have to filter. In addition, there is a filtration avoidance exception that allows a municipality to use a combination of social and biological controls, instead of technology, to ensure that the water is free of pathogens. The regulations that enable filtration avoidance mandate a watershed control program over "human"

activities which may have an adverse impact on the microbiological quality of the source water." ¹²⁶

The Catskill and Delaware Watersheds, which are located west of the Hudson River, normally supply New York City with 90% of its water. ¹²⁷ In 1993, EPA issued its first filtration avoidance determination (FAD) for these two watersheds. ¹²⁸ After extensive negotiations, New York City agreed to pay for upgrades to septic systems, wastewater treatment plants, and barnyards, and implement other programs that would limit the possibility of microbial contamination in the water. ¹²⁹ In exchange, the residents and municipalities in the two watersheds were subject to more stringent requirements than the rest of the state. In 1997 and 2002, EPA granted the city its second and third five-year FADs, and in 2007 it granted a tenvear FAD. ¹³⁰

However, EPA, which administers the SDWA, does not simply divide watersheds into filtered and unfiltered systems. Instead, the agency requires a multi-barrier approach to protect the quality of all surface waters, even if the water is going to be filtered before it is consumed. This multi-barrier approach was incorporated into the SDWA as part of the 1996 amendments, and memorialized in the 1997 New York City filtration avoidance agreement. 132

[T]he effectiveness of the filtration process and complexity of plant operation is dependent upon the quality of the water entering the filtration plant. In addition, many contaminants are not removed by conventional filtration. Therefore it is clear that enhancement of the City's existing watershed rules and regulations would be necessary even if the City were to build filtration plants to filter its entire water supply.¹³³

Unlike EPA, DEC draws a sharp distinction between filtered and unfiltered water supplies in its draft SGEIS. DEC concludes that gas drilling poses a remote but unacceptable risk to unfiltered drinking water, and proposes a complete ban in those watersheds. 134 DEC reaches this conclusion by assuming that gas drilling will create more turbidity than other development, and that potential impact, along with the risk of toxic spills, could result in the loss of filtration avoidance. 135 Therefore, the agency has proposed a complete ban on gas drilling within 4,000 feet of the border of watersheds that have filtration avoidance: the Catskill and Delaware watersheds, which supply New York City, and Skaneateles Lake, which supplies Syracuse. 136 Gas drilling in watersheds that are filtered can proceed, as can drilling in the unfiltered watersheds and recharge areas of individual homeowners.

In addition to surface water requirements, the SDWA also includes an underground injection control (UIC) program.¹³⁷ However, the oil and gas industry's use of

hydrofracking was granted an exemption to this program in the 2005 Energy Policy Act. ¹³⁸ This exemption is commonly referred to as the "Halliburton loophole" because of Dick Cheney's role as both Vice-President of the United States and former CEO of Halliburton, the company that controls the main patent on the technology that underlies hydraulic fracturing. ¹³⁹

B. Is Unconventional Gas Drilling Worth the Risks?

Every step of the process of HVHF carries significant risks to water, and the people, plants, and animals that rely on it. For example, well pads, access roads, and pipeline construction cause forest fragmentation, stormwater runoff, and degradation of water quality;140 water withdrawals threaten aquatic life, water quality, and the rights of riparian users; 141 toxic fracking chemicals are spilled during transport to the site, on-site, or at some stage of processing flowback waste;¹⁴² methane can seep through the cement casings outside the well piping and cause explosions, water contamination, and powerful greenhouse gas emissions;¹⁴³ water supplies can be contaminated with methane and fracking fluids; 144 wastewater can pollute rivers either through spills or the discharge of effluent that has not been adequately treated;¹⁴⁵ and people and animals can be sickened by heavy metals, volatile organic compounds, endocrine disruptors, and radioactivity. 146 While New York's common law and statutes may provide remedies after an injury has occurred, they are incapable of stopping the impacts and accidents that are associated with fracking.

The most infamous example of gas drilling fouling private water supplies took place in Dimock, Pennsylvania, where methane leaked from nearby gas wells into water aquifers, flinging an eight-foot wide concrete slab off the top of a well, and contaminating the water of sixteen households. ¹⁴⁷ The responsible gas companies were fined and ordered to provide water to the residents. ¹⁴⁸

In an attempt to control the impacts of unconventional gas drilling so that such events do not happen in New York State, DEC has developed a regulatory regime that offers guidelines on how to build well pads and access roads, store fracking chemicals, and case well bores. 149 However, many citizen advocates do not believe these regulations will stop the fragmentation, spills, contamination, or resulting sickness. 150 Nor do the proposed regulations reassure the people who live where the drilling will take place. 151 Many have come to understand that the entire enterprise surrounding unconventional gas drilling ensures our continued addiction to fossil fuel. 152 In response, some of these citizen advocates have drawn the line in the sand and hope to stop the development of this decentralized and invasive form of energy extraction before the infrastructure makes it a fait accompli. 153

On the other side are a variety of interests. Some individuals and groups have an interest in boosting in-

dustrial jobs, or in maintaining the world's dependence on fossil fuel, while others say it can be done safely if regulated properly.¹⁵⁴ Many believe that natural gas is cleaner than coal, and could reduce our greenhouse emissions. However, recent studies question that assumption because methane is 20 to 25 times more potent as a greenhouse gas than carbon dioxide, and its impact could be particularly damaging in the short term as climate change approaches a tipping point. 155 Others point out that fracturing shale may create long-term pathways for the migration of methane from the depths of the earth to atmosphere. 156 In New York, many of the people who live on the receiving end of the gas pipelines favor the development of shale gas.¹⁵⁷ But they hide behind a secret that is obvious to the rest of the state—they do not want any gas drilling in the watersheds that supply them with water. ¹⁵⁸

Contrary to many people's understanding, New York City and Westchester County are as vulnerable to the gas drillers as the rest of the state. The proposed ban in the Catskill and Delaware watersheds is dependent on maintaining filtration avoidance, and there is no guarantee that status will last, particularly if gas drilling proceeds in the rest of the state. 159 The demographics of New York have changed dramatically over the last thirty years, with many people moving upstate from urban and suburban areas. 160 These "transplants" will simply emigrate from watersheds where fracking is allowed into the Catskill and Delaware watersheds in order to avoid gas drilling. Their immigration will increase the number of single-family homes and subdivisions in the Catskill and Delaware watersheds. Clearing land for new homes will increase turbidity and probably trigger an order to filter. 161 In fact, DEC refers to a study that indicates that even under current trends, New York City is likely to lose its filtration avoidance status. 162 According to the draft SGEIS, once EPA orders filtration, then fracking would be permitted in the Catskill and Delaware watersheds.

The proposed schedule for buffers and bans in the draft SGEIS implies that DEC is intending to phase in gas drilling across the state. The water supplies of the rural areas are being given the least amount of protection when hydrofracking starts, and after two or three years, the buffers for primary and principal aquifers may be reduced. Once the industry becomes well established in the state, then even the watersheds that currently enjoy a complete ban because of filtration avoidance may lose that protection and also get fracked.

IV. Conclusion

The gas and oil industry has attempted to associate shale gas drilling with the clean blue flame of conventional gas drilling. While its branding succeeded for a number of years, fracking is now associated with dirty water that bursts into flames. Many citizen advocates from New York State do not believe that the intense, decentralized

process of extracting methane from almost solid shale can be done safely, and simply want it banned. Their representatives in state and national governments need to catch up with them, and promote truly clean alternatives to power our nation. The fate of the Empire State is in their hands.

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- 52. 2011 Revised Draft SGEIS at §§ 5.1.4.2; 5.2.2. This document "anticipates" the number and types of wells and well pads based on projections made by the industry. These projections should not be confused with the vastly greater number of wells that the law actually allows.
- 53. *Id.* at § 5.1.4.2. DEC specifically retains discretion to permit wells at a greater density.
- 54. Id. at § 5.2.2.
- 55. Arthur Berman, Shale Plays: A Time for Critical Thinking (Oct. 2009); Ian Urbina, Insiders Sound an Alarm Amid a Natural Gas Rush, New York Times (June 25, 2011), available at http://www.nytimes.com/2011/06/26/us/26gas.html.
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- 57. New York State Department of Environmental Conservation, *Statewide Spacing Unit Sizes and Setbacks, available at* http://www.dec.ny.gov/energy/1583.html.
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- 61. *Id.* at §§ 5.2.5.1, 5.7.2.
- 62. *Id.* at §§ 5.1.1, 8.1.2.1. Industry has estimated that the typical access road for a well pad will require .27 acre of land. DEC has not included any information on the potential impacts of gathering lines, which are needed to bring the gas from each well to the distribution lines. The Public Service Commission regulates distribution lines.
- 63. *Id.* at § 6.11; table 6.62, p 6-303; figure 6.21, p 6-304.
- 64. Fracking Hollenbeck Gas Site (Dec. 15, 2011), available at http://www.youtube.com/watch?v=zPE2RU5099U.
- 65. 2011 Revised Draft SGEIS at §§ 4.3, 4.4; figures 4.4; 4.8. The Utica shale underlies more than half of New York State.
- 66. It must be emphasized that there are profound social impacts associated with gas drilling, which this paper is not mentioning. These include: (1) disruption or destruction of traditional land based economies, such as tourism, farming, hunting, and fishing; (2) rising prices, especially in the housing market, which may lead to rural homelessness; (3) rendering properties ineligible for mortgages; (4) increased need for social services; and (5) emigration to areas where fracking is prohibited in order to avoid the impacts.
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Anne Marie Garti is a 2013 J.D. Candidate at Pace University School of Law. This article was written for a water resources class taught by adjunct professor Philip Weinberg. In her prior career, Anne Marie was a pioneer in the field of interactive publishing, where she created award-winning products, acting as information analyst, interactive designer, producer, and consultant. She also founded the Jerome Park Conservancy, and led the successful fight against building a water filtration plant in the Jerome Park Reservoir.



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Evolving Environmental Law and Advice to "Green" Lawyers

By Alexis Saba and John Wood

Introduction

It is remarkable how far environmental law has come in the four decades since the enactment of the National Environmental Policy Act—but also how much work remains to be done to cut pollution and resource consumption to sustainable levels and to protect the public from the many health problems that attend our industrialized economy. Despite significant progress yet to be made in the field, the political climate and economic market of recent years seem to put environmental law at risk. Presidential candidates and politicians in the House of Representatives have called for the outright abolishment of the United States Environmental Protection Agency or have introduced legislation to take away its funding or prevent the implementation of certain rules. The sprawling economic recession of 2008 led to a decline in legal hiring across the board, with environmental law jobs particularly difficult to find. What do these circumstances mean for environmental law and lawyers today?

A point of comparison is Michael Gerrard's 2000 *Columbia Journal of Environmental Law* article, which evaluates the nature of environmental law at a time when the field appeared to be declining in popularity.² He cites many reasons for the decreased demand for lawyers in the mid to late 1990s: fewer Superfund cases, congressional hostility to new environmental laws, familiarity with existing laws and regulations by in-house counsels and consultants, a lack of new areas of litigation, depletion of the low-hanging fruit of citizen suits, and decreased economic activity generally.

The boom times never returned, and the image of today's environmental law market looks quite similar to the picture Gerrard painted 12 years ago. Therefore, the question Terry Bossert posed in a 2005 article remains relevant: Is the practice of environmental law declining or merely changing?³ As discussed further below, the answer seems to be the latter.

We live in an increasingly "green" world: sustainability is a business megatrend, climate change generates global conferences and Supreme Court cases, green jobs are a staple talking point among progressive policymakers, and the cleantech industry is generating substantial private investment. In part because of the success of the environmental movement, there are hundreds of law school graduates entering the field every year with unparalleled levels of experience early in their careers, and they have a striking interest in the multidisciplinary environmental issues of our time. However, they consistently voice concern that they will not be able to practice environmental law right away (for many, the reason they went to law school) and face uncertainty about how to prepare for a future environmental law career in the meantime. For many new entrants

to the field, it feels as if the practice of environmental law is in decline. How can we square the growing prominence of environmentalism in the public and corporate spheres with the apparent diminution of the environmental law practice area? The field is changing and so too are those who seek to practice in it.

Through interviews with new and experienced environmental law practitioners, this article aims to address this conundrum in more detail: How has the field of environmental law changed? What skills and experiences are necessary to succeed in the new landscape of this practice area? What are the landmark issues that must be addressed by the new generation of environmental lawyers? What is the general profile of newly minted environmental attorneys? Many experienced practitioners interviewed for this article are the so-called "parents" of the environmental law field, responsible for shaping early legislation, bringing the first test cases under the provisions of those laws, and commenting on the development of federal regulations as the administrative arm of the federal government began to expand into the environmental field. We appreciate the chance to share their memories and experiences here, alongside the reflections of new environmental lawyers.

II. The Changing Nature of Environmental Law

Experienced practitioners paint a historical picture of environmental law similar to that described in Gerrard's 2000 article⁴ and in Bossert's 2005 article.⁵ The 1970s saw the creation of most major environmental statutes and the birth of many of today's large environmental law non-profit organizations. Very few, if any, large law firms had environmental practices at that time, and there were only a couple of small environmental law boutique firms. In general, most attorneys working in environmental law were either people new to the field or administrative law practitioners learning and developing an expertise as the laws and regulations were being written. The field remained small into the 1980s, with air and water pollution control as well as NEPA and SEQRA environmental quality review dominating environmental practice.

By the late 1980s and early 1990s, CERCLA and RCRA work dominated the field. CERCLA—or "Superfund"—was a real game changer for environmental law. The opportunity for CERCLA work led even medium-sized firms to start up environmental practices and major corporations to hire environmental lawyers. That environmental law boom was and remains unprecedented.

While CERCLA and hazardous waste issues continued generating environmental law jobs, Michael Gerrard in his 2000 article provided quantitative data confirming the

intuition at the time that the environmental market had changed.⁶ New CERCLA cases were down, and many of the existing cases were settling. No new environmental statutes had been enacted since the early 1990s (the Oil Pollution Act and the Clean Air Act Amendments), making the environmental field familiar enough to in-house counsel and environmental consultants that outside attorneys were not needed as frequently as in previous decades. Major cases surrounding insurance coverage litigation and asbestos injury litigation were winding down. Relatively winnable citizen suits had already been brought. Gerrard predicted growth areas to be in brownfield redevelopment and land use generally as well as natural resource damages, among others. Bossert also named these as growth areas and expected increased work around litigation of Total Maximum Daily Load (TMDL) permits as well as in the areas of renewable energy and energy conservation, water resources and interstate basin compacts, and critical habitat designations. At the time, climate change was a hot topic of conversation but had not produced much legal work.

Today, hazardous waste work and brownfields rehabilitation are seen as great successes. Scott Sherman, a Managing Director of the brownfield redevelopment firm Hemisphere Development LLC and former director of corporate environmental affairs for Hess Corporation, comments, "No longer are we content to let well-positioned and otherwise valuable properties linger underutilized and contaminated. Working contemporaneously with trends in urban infill and adaptive reuse planning, we've been able to reform statutes and regulations to facilitate brownfield redevelopment, establish meaningful and fiscally prudent tax and financial incentive programs, and partner with local leaders, impacted communities, real estate developers, and planners to really transform blighted sites and position them for success." That being said, with the success of these programs and the manufacturing decline in many states like New York, some traditional environmental law employment opportunities are closing. Routine environmental work at large firms today is generally transactional, although many firms do cost recovery/ contribution/contract litigation. Smaller firms also get involved in environmental issues primarily through their litigation and insurance practices. The herculean process of mitigating climate change has not generated nearly as much work in legal practice as it could if Congress were to tax greenhouse gas emissions or resuscitate a cap-andtrade program through climate change legislation.

As for the future of environmental law, experienced practitioners expect new practice areas to emerge around renewable energy and climate change, especially as lawyers think of creative ways to bring lawsuits and continue work on the state and local levels—as well as with the eventual expansion of legislation on both of these issues. Legal work surrounding green building development was growing quickly before the financial crisis and will likely resume as the economy recovers. Other potential growth

areas include legal issues relating to water rights as climate change imposes greater constraints on water resources, the patenting of renewable energy and energy efficiency products, and product liability or contract lawsuits based on the "green" status of products. European regulation regarding hazardous substances in products is already affecting American manufacturers, and similar regulation in the future might provide work for attorneys in the United States. Stu Gruskin, former Executive Deputy Commissioner of the New York State Department of Environmental Conservation, would like to see a significant shift in the way the environmental laws are applied in the future. He thinks there are many opportunities for collaboration between the public and private sectors and that more creativity in enforcement could lead to more effective and efficient problem solving, especially in a budget-constrained country increasingly skeptical of environmental laws.

While there is hope for change in the future, many environmental lawyers expect the field to remain similar to where it is today, with an emphasis on transactional work and brownfields redevelopment—and with continued debate over the scope of environmental regulation in the near- to mid-term. Summarizing the sentiment of many, Chris Saporita, an attorney with EPA Region 2 and the founder of the New York City Environmental Law Leadership Institute (NYCELLI), notes, "As long as we create pollution, we will need environmental laws and environmental lawyers."

There will also always be environmental work created by widespread technological changes that impact energy economics. The Coal Rush that saw over 200 proposed coal plants sited throughout the country generated substantial environmental litigation, until low natural gas prices shifted policy attention toward the regulation and development of natural gas. The use of hydraulic fracturing, a drilling technology that uses millions of gallons of fresh water to pump mixtures of sand and chemicals thousands of feet into the earth to obtain natural gas from various shale formations throughout the country, has caused an uptick in state and federal regulatory developments that require legal analysis and some opportunities for litigation. Similar to technological changes in the energy sector, industrial accidents can also generate environmental law work. Although catastrophic industrial accidents such as the Deepwater Horizon explosion and oil spill affect the environment significantly, they are at least as much fodder for the plaintiff's bar as work for the environmental law community.

Attorneys new to the field are hopeful for climate and energy legislation in the future, but similar to experienced lawyers, they do not foresee major advances in the near-term. There is a distinct concern that the influence of corporate dollars in politics today and the serious attempts to roll back basic environmental accomplishments might have lasting impacts on the quality and effectiveness of environmental laws—and on the ability to practice in a pro-

gressive, creative way, especially in the public sector. Some interviewees forecasted an increasingly regulatory emphasis to environmental practice, possibly evident already by the consolidation of environmental work in Washington, DC and California. There is a hope that the complex, global nature of many environmental issues will drive new, solutions-based work, but some new lawyers sense that the substance of practice is becoming more narrow and focused as everyone becomes more experienced with the bread and butter environmental issues. Predictions for the practice areas that will drive environmental law in the future include chemicals, with TSCA ripe for reform, and energy/utilities, with new technology and air regulations as well as increasing demand pushing the energy market.

III. A Profile of New Environmental Lawyers

In describing the roots of their interest in and dedication to the field, seasoned environmental lawyers cite a love of the outdoors and a personal disgust at the numerous affronts to nature and human health they recognized early in life. The new crop of environmental lawyers shares these sources of inspiration but with two notable differences, generally: how early this generation's lawyers were able to transform their awareness of environmental issues into valuable experience and how seamlessly they translated this passion for environmental protection into a career choice.

Many recent graduates interviewed for this article discussed a particular local environmental injustice that captured their attention at a young age or an engagement with global media that put their healthy childhood environment in stark relief. From there, they wrote middle school papers on the Arctic National Wildlife Refuge and on the ramifications of global warming. They recognized as teenagers that low-income communities of color suffered disproportionately from environmental pollution and concomitant health problems—and wanted to correct a dearth of legal and advocacy resources flowing to such communities. The resounding response from new environmental lawyers is that they wanted to be good stewards and powerful advocates and, as early as high school, saw a legal career as a way to make change.

This group has not taken environmental wins for granted and has not grown apathetic in the face of remaining challenges. New environmental lawyers' concern for our future is sophisticated, multifaceted, and vital. They have taken great care to learn more about environmental law and to gain expertise in the field. New lawyers interviewed for this article took courses, amassed work experience, and participated in extracurricular activities geared toward the environment throughout college and law school. Some acquired specialized degrees, and many participate in professional organizations. The interviewees have engaged in a remarkable amount of speaking and publication, from representing the International Union for the Conservation of Nature as its environmental advisor to

the United Nations to speaking at Yale's 2012 New Directions in Environmental Law conference.

Indeed, environmental lawyers entering the field today were born at a time when the environmental movement was mature and environmental law was hitting its stride. The Exxon Valdez spill was news, Captain Planet was a popular television show, and recycling lessons infused elementary school curricula. These new practitioners are part of Generation Y ("Gen Y" or "the millennial" generation)—people born in the 1980s and characterized as team-oriented, values-driven, and tech-savvy. They respond quickly and passionately to injustice and are not afraid to confront the establishment course.

Nonetheless, it is challenging to characterize a whole generation, especially when demographic differences still significantly influence one's upbringing and values, despite a pervasive social media. For example, although news sources claim that Gen Y identifies with large cultural movements such as gay marriage or disaster relief efforts, they also indicate that many from this generation do not follow through with action; a blog post from 2010 notes that 69% of Gen Y interviewees expressed genuine interest in the environment but lacked personal involvement.⁹ This characterization matches well with the profile painted by new environmental lawyers interviewed for this article. Respondents consistently claimed that Gen Y is more aware than previous generations of environmental justice, climate change, energy constraints, and natural systems generally. However, the interviewees also were troubled by this generation's distinct lack of action to rectify recognized environmental and societal ills.

This awareness-action disconnect within the millennial generation generally is something new environmental lawyers will have to grapple with as part of the changing environmental law market. Specific environmental issues are less tangible threats to the public than in the past; sea level rise does not occur on the same time scale as a river catching fire, and particulate matter in the smog over a busy freeway is not as ghastly as the sheen of a crude oil spill on the Alaskan coast. These complex environmental issues that take place over a long time horizon can lure the public—and clients—into inaction. Gen Y environmental lawyers in the private and public sectors must overcome the communication obstacle created by increasingly complex environmental pathways, increasingly nuanced science, both causing increasingly less obvious forms of environmental degradation to justify the need for their involvement.

IV. Succeeding in the Peculiar Environmental Law Job Market

While there is overwhelming hope for the future of environmental law and clearly much work to be done, the job market today is tough. Statistics from Columbia Law School reveal a sharp decrease in hiring for recent graduates: 74% of the class of 2011 worked at law firms during

their 2L summer versus 92% the previous year. ¹⁰ Figures are a little better for the class of 2012, with 77% of the class working at law firms their 2L summer. The report from Columbia notes that government and public interest jobs have been even harder to land than law firm positions.

While some sources from the 2008-2010 period emphasize a robust future for environmental law, 11 discussion board comments paint a picture of intense competitiveness. A comment from 2008 laments, "If you don't have the prerequites [sic] '3-5 years' or a book to bring with you, you're doing well to get an interview."12 A remark from 2010 notes that students from Pace, the third ranked environmental law school in the country, 13 were struggling to find jobs. 14 Many new environmental lawyers interviewed for this article reported difficulty in finding a job in the field, especially right out of law school and with the less than the three to five years frequently desired by employers. Many of those with environmental law positions are employed through one- or two-year fellowships in the public sector, leaving long-term employment in environmental law uncertain.

Some of the current competitiveness is due to the general economic crisis, which has led law firms, government agencies, and non-profits to eliminate positions or avoid rehiring when senior employees leave, as well as to public interest jobs being filled by furloughed law firm associates. There is just more competition for jobs, even if, as one interviewee notes, there may be more openings now than in the mid-2000s. Recent law school graduates or those finishing judicial clerkships with an interest in public interest work have traditionally filled fellowships, honors programs, and other entry-level legal positions in environmental organizations or agencies. These positions are critical stepping-stones into environmental law practice, as the quality of experience, learning, and networking they provide is otherwise difficult to come by. At a time when the workforce for environmental law practice is apparently shrinking, applications for these key entry-level positions are coming in from attorneys with four or more years of experience as well as appellate clerkships under their belts. Summer internships are being awarded to adjunct professors and others with considerably more prior professional experience than summer interns in the past. The notable shift upwards in the competitiveness of applicant pools for entry-level public interest environmental law positions indicates significant under-employment in this area.

Nonetheless, there do seem to be some geographic trends in the environmental law market that stand outside today's immediate economic conditions. Possibly in part because of the changing nature of environmental law described above, the market seems to be centralizing in Washington, DC and California, with firms in many other geographic markets significantly consolidating their environmental practices or eliminating them altogether. While some local firms that do routine permitting and some state regulatory work seem to be holding relatively steady in

state capitals, many of the environmental law practices in other geographic areas appear to be shrinking. New environmental lawyers interviewed for this article cite particular difficulty with the market in New York City, which appears dominated by opportunities in finance, especially in recent years where even real estate development and the associated environmental due diligence has taken a hit.

Given these short- and long-term market considerations, what can today's new environmental lawyers or those considering environmental law do to prepare for a tough and changing field? Typical advice includes getting involved in environmental law as early as possible through coursework, internships, and extracurricular activities—and later on, joining professional organizations, speaking at conferences, and publishing. New and experienced practitioners alike recommend building mentor relationships, which can help bridge the gap between the theory and practice of law. 15 Many interviewed for this article became interested in environmental law or found a job through a mentor. Clerking can provide excellent mentoring relationships and invaluable experience with litigation and legal analysis generally. As demonstrated above, however, many lawyers new to the field have already checked off these boxes, continue to network, and remain engaged in the environmental law community.

A variety of interviewees provided wisdom that is helpful for new lawyers who feel the need to become engrossed in environmental law to be competitive: do not focus on environmental law to the exclusion of political, business, technological, and scientific developments that influence the field. 16 Scott Sherman of Hemisphere Development LLC comments, "The increased visibility of environmental issues has changed the skill set that today's environmental lawyers must bring to the table. From the Executive Branch to the corporate boardroom to the media and NGOs, a huge cross-section of the economy is now tracking and analyzing environmental issues. You have to be able to talk to the business community about environmental liabilities and risk management, present cogent arguments to environmental agencies that are grounded in both regulation and emerging policy considerations, and engage with stakeholders in town halls and panels in a constructive, balanced manner."

Specific suggestions for how to be a well-rounded environmental lawyer include honing good communication skills, developing meticulous analytical abilities, getting both public and private sector work experience, and trading in hours at the computer for time in the field, where the real environmental issues are and have to be dealt with. New environmental lawyers should avoid taking extreme positions and strive to be good negotiators; one of the greatest skills is to be able to unite diverse stakeholders to arrive at creative solutions to challenging, multidisciplinary environmental problems. In addition, experienced practitioners remind newcomers not to be too selective about jobs early on. Recent graduates would benefit from

trying litigation if they think they might be interested in that route, but any transactional or litigation experience is helpful. The most important thing is to have a job and get work experience, even if it is not strictly environmental. Many attorneys interviewed for this article got their start outside environmental law but honed skills and made contacts that helped them break into the field. In addition, those interested in environmental law might consider traditionally distinct fields that are increasingly joined with environmental practices such as energy, real estate, and land use. The New York State Energy Highway initiative to upgrade and modernize the state's energy system is one example of a large-scale, innovative program that might generate environmental and energy-related work in the public and private sectors.

V. Conclusion

In the environmental law field, there seems to be less work to do and more people willing to do it. This paradox will doubtless leave many young lawyers disillusioned and questioning how to find or create meaningful opportunities to apply their legal knowledge and passion to environmental problem solving. However, if environmental law really is changing rather than declining, then new environmental lawyers must prepare themselves to be adaptive. This may mean digging in and honing generic lawyering skills or stepping back and bringing a legal background to bear on non-legal environmental issues. This certainly means being creative, flexible, and open to the intellectual challenge that comes with the aging of our bedrock environmental laws and with the evolving environmental attitudes of the American populace.

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- 16. See also Environmental Law Got Hotter Than Usual This Summer, THE NATIONAL JURIST, July 7, 2010, available at www.nationaljurist.com/content/environmental-law-got-hotter-usual-summer ("You have to be very willing to learn scientific terms and not be afraid to talk to technical experts.... You also have to acquire and maintain a broad range of knowledge, and you have to be familiar with other practice areas.").

Alexis Saba, J.D. Cornell Law School, is a Legal Fellow at the Columbia Center for Climate Change Law.

John Wood, J.D. NYU School of Law, is a Consultant for the American Conservation Association.

Hydraulic Fracturing in the Marcellus Shale: The Need for Legislative Amendments to New York's Mineral Resources Law

By Patrick Siler

Introduction

On New Year's Day, 2009, in the small town of Dimock, Pennsylvania, Norma Fiorentino's water well exploded. Other residents of the same community observed that their water was discolored and that it would bubble, foam, or give off odors. Testing by the state Department of Environmental Protection revealed that nearby drilling for natural gas had exposed the aquifer to methane. The drinking water of at least nine homes was contaminated. Four were at risk of exploding. In 2009, as industrial drilling for natural gas began in earnest, more than a dozen accounts of drinking water polluted by toxic contaminants surfaced throughout Dimock.

Dimock is one of hundreds of local jurisdictions in the Northeast that have seen a dramatic increase in recent years of a process of drilling for natural gas known as hydraulic fracturing, or "fracking." This "gas rush" is the result of a confluence of recent events, including high energy prices, economic recession, state budgetary shortfalls, and industry exemption from federal regulation, to name a few. Chiefly, it stems from the advancement of fracturing technology to allow for increased gas extraction from tightly packed formations of shale.⁶ The gas extraction industry has accelerated development of a formation known as the Marcellus Shale Play, a large, subterranean formation that stretches from the Southeastern corner of Ohio through West Virginia, Northwestern Pennsylvania, and into the Catskill Mountain region of New York State.7

As the development by natural gas extractors of the nearby West Virginia and Pennsylvania Marcellus increased, a debate began about the practical implications of hydraulic fracturing in New York State. Proponents of the practice point to studies concluding that hydraulic fracturing does not pose a significant threat to drinking water supplies.8 They emphasize the potential benefits of the practice, noting that natural gas development could provide a desperately needed economic boost to a chronically depressed region within a state suffering from historic budget shortfalls.9 It could also bring a cheap, clean source of energy to the nearby power-hungry metropolitan areas of New York and Philadelphia. 10 Opponents counter with numerous anecdotal accounts of poisoned wells, flammable tap-water, and deteriorating health in communities across the country where the common factor is a local increase in fracking.¹¹ They note particularly that the Marcellus Shale formation lies deep underneath the Catskill watershed, which supplies drinking water to over 9 million people in the Greater New York City area. ¹² Due to the high quality of that watershed, the City is able to provide unfiltered water directly from upstate, saving the billions of dollars it would otherwise be forced to spend on filtration. ¹³ Contamination of the Catskill watershed, fracking opponents argue, would be catastrophic. ¹⁴

Faced with the conflict between pressure to develop one of the world's largest natural gas fields and equal pressure to protect one of its most vital sources of drinking water, the New York State Senate chose to err on the side of caution. In August of 2010 the State Senate passed a bill suspending the issuance of new permits for hydraulic fracturing in the Marcellus Shale formation in order to "continue the review and analysis of the effects of hydraulic fracturing on water and air quality, environmental safety and public health." The Governor vetoed the legislation, but enacted a narrower moratorium by Executive Order. The Order prohibited the issuance of permits for "high-volume, horizontal hydraulic fracturing" until July 1, 2011. The ban has since remained in place pending the further revision of State regulations.

Barring further action by the legislature or the Governor's office, fracking in the New York Marcellus will soon be a reality. Should the ban on the practice be lifted, it will be regulated under New York State law.¹⁹ This article explores the regulatory framework currently in place in the state and tests it against several issues of practical application evident from the experiences of other states that have dealt with the matter.²⁰

The statute governing regulation of the hydraulic fracturing process in New York State contains a number of internal contradictions. The statute states its policy goals as follows: first, to regulate the development of oil and gas "in such a manner as will prevent waste"; second, to develop properties "in such a manner that a greater ultimate recovery of oil and gas may be had"; and third, to protect fully "the correlative rights of all owners and the rights of all persons including landowners and the general public."²¹ The policy objectives listed illustrate the overarching contradiction contained in the statute: The state may choose to prevent waste and thereby achieve a greater recovery of oil and gas, or it may choose to protect fully the rights of all persons. It cannot do both at once. The conflicts between the statute's stated policies are illustrated by examining three main subjects.

First, limiting the statutory definition of "waste" to only the physical waste of oil and gas fails to account for the overall impact and resource expenditure of excess drilling. Second, the New York statute does not sufficiently address likely conflicts of interest between lease-holders and property owners, both of whom hold correlative rights in produced gas. Specifically, the statute is inconsistent on two issues: first, the inevitable question of whether fracking constitutes a trespass on—or rather under—another's land; and second, the tension between the rights of landowners and the State's policy of compulsory integration of property to facilitate a greater recovery of gas. Lastly, the statute fails to delineate clearly the rights of the municipalities that most directly represent the local public.

In the interest of maximizing the efficacy of the law's stated policy objectives—a greater recovery of gas, protection of the correlative rights of property owners, and the full protection of the rights of all persons, including producers and the general public²²—and minimizing the need for court action in addressing potential conflicts, this article concludes by recommending the following discrete amendments to the current regulatory framework. First, the legislature should adopt a more comprehensive definition of waste that includes environmental waste and disposal. Second, legislators must reconcile the conflict between landowners' rights and the practice of compulsory integration in one of two ways: either by recognizing that the rights of landowners are subservient to the state's interest in facilitating the recovery of gas, or by preserving the right of landowners to keep their land free from industrial drilling and ending the practice of compulsory integration. Third, legislators should define the rights of operators on land compulsorily integrated under the present system. Finally, recognizing that the municipality is the political entity most receptive to the will of the public at the local community level, the power of local governments to determine what procedures may be imposed on industry to safeguard their local resources must be made clear. The state legislature should define the term "regulation" in Article 23's supersession clause to specify how much control local governments may exercise over the location of drilling and the traffic to drilling sites.

I. Background

A. Fracking: The Process

Hydraulic fracturing allows for effective extraction in areas where conventional drilling would otherwise be inefficient and uneconomical. Conventional drilling is achieved by the boring of a shaft into the ground until it taps a pool of oil or gas. Extraction continues until that pool is exhausted.²³ But because of the extremely low natural permeability of shale, in a formation like the Marcellus, vast reserves of natural gas are effectively captured, bound up in the many stratified layers of rock, and unable to collect in large, unitary pools.²⁴ A conventional well, therefore, can extract only a very limited amount of gas from the area beneath it. Given the high cost of drill-

ing, the extraction industry has understandably refrained from embarking on conventional drilling ventures likely to return only a meager yield.²⁵

The fracking process, on the other hand, provides a technological means of extracting gas from shale more efficiently. The process begins in much the same way as conventional drilling: the extractor bores a hole into the ground, but at a somewhat horizontal slope, cutting across a wide area of the shale formation rather than straight down into it. Wells can extend laterally as far as 5,000 feet.²⁶ The extractor then injects water treated with a mixture of chemicals and solid particles—called propping agents or "proppants" 27—into the well with high-pressure pumps. The pressure causes the rock to crack, allowing deeper penetration by the treated water and breaking the shale into small pieces.²⁸ The chemical compounds with which the water has been treated allow the proppant to congeal, forming fissures in the rock around the well. These fissures cause the natural gas that would otherwise remain trapped in the shale to flow into the well where it can be extracted, stored, and ultimately transported for use in the energy market.²⁹

Although recovery of natural gas by hydraulic fracturing has been highly lauded by many industrialists and politicians as a cleaner energy alternative to coal and oil, as well as a key component of American energy independence,³⁰ several environmental concerns cloud fracking's "green energy" pedigree. Chief among these concerns is the fact that the fracking process requires the use of massive amounts of water. Drilling a well can require as many as 600,000 gallons of water, and each frack of an individual well requires between 50,000 and 350,000 gallons of water.³¹ This water can be transported via pipeline, but is more often trucked to extraction sites. Transporting this quantity of water requires the use of hundreds of tanker trucks for the drilling and initial frack of a single well. Given that each well is likely to be fracked up to eighteen times before it is closed and abandoned, the amount of water consumed per well can exceed five million gallons.³² This level of water usage, along with the fuel expenditure and resultant emissions commensurate with the trucking of that water, thus give the hydraulic fracturing process a significant environmental footprint.

But the issue of the sheer amount of water—itself an increasingly scarce resource—that the fracking process requires is directly connected to a second key environmental concern: how to handle that volume of water after it has been used. The extraction industry describes water that has been treated for hydraulic fracturing as produced water or "flowback."³³ Produced water contains both proppants and a chemical "cocktail": a blend of chemical agents not typically disclosed to the public because extractors regard individual chemical blends as trade secrets. ³⁴ Although the specific composition of many of these compounds is unknown, commonly used components include benzene and ethylene—known carcino-

gens.³⁵ Fracking fluid is further contaminated during the pumping process because it is exposed to the methane gas that it is intended to help extract.³⁶ Extractors can recover between 68 and 82 percent of the water used in the drilling and fracturing processes, but the remainder of this produced water remains in the ground.³⁷ Produced water thus creates two distinct environmental issues: first, the potential impacts of the unrecoverable water on the surrounding areas; and second, the question of how best to handle the water that has been recovered.

The potential environmental and health impacts of unrecovered fracking fluid in deep shale formations are largely unknown. In 2004, the EPA conducted a study of the practice of hydraulic fracturing in underground coal formations. The study raised the possibilities of artificial fractures extending to an underground source of drinking water ("USDW") or facilitating the movement of produced water through natural formations into a USDW as "scenarios...of potential concern." 38 The EPA concluded, though, that "the injection of hydraulic fracturing fluids into coalbed methane wells poses little or no threat to US-DWs" and that "[a]lthough potentially hazardous chemicals may be introduced into USDWs when fracturing fluids are injected into coal seams that lie within USDWs, the risk posed to USDWs by introduction of these chemicals is reduced significantly by groundwater production and injected fluid recovery...."39 Still, the EPA did not rule out the potential for contamination of drinking water sources by fracking fluids. Rather, the Agency's study concluded only that among the incidents of drinking water contamination, the study found no "confirmed evidence that drinking water wells have been contaminated by hydraulic fracturing fluid injection."40 Recognizing the acute toxicity of at least one common additive to fracking fluid diesel fuel-the Agency "reached an agreement with the major service companies to voluntarily eliminate diesel fuel from hydraulic fracturing fluids that are injected directly into USDWs for coalbed methane production."41

The environmental and health impacts of produced water that has been recovered, though also largely untested, are potentially even more profound. Unlike the fracking fluid that remains underground, often thousands of feet beneath potential drinking water sources, produced water that is recovered must be stored above ground until transportation to a long-term storage or treatment facility can be arranged. 42 One common method used by the industry is the storage of produced water in open containment pits or tanks, where it awaits trucks to carry it away. 43 Potential for spillage or leakage into the surrounding environment is high any time the water is moved from one location to another.⁴⁴ Due to the interconnectedness of water systems, spills or leaks of produced water can easily travel significant distances and ultimately affect drinking water, as well as animal and plant life, far from the drilling site.⁴⁵

In addition to water use and contamination concerns, gas wells utilizing the fracking process pose potential problems to air quality as well. During production, some gaseous hydrocarbons change state and become a liquid, referred to as condensate. ⁴⁶ Tanks collecting condensate on drilling sites vent benzene, toluene, xylene, and ethylbenzene into the air. Because the vapors of these hydrocarbons are heavier than air, they can accumulate in the surrounding areas. ⁴⁷ Prolonged exposure to significant quantities of the vented hydrocarbons can lead to serious health effects, including irreversible nerve damage. ⁴⁸

B. General Regulatory Structure

The regulation of the recovery of natural gas by underground injection of fluids is solely within the purview of the state where the drilling operation is conducted. Before 2005, the process was subject to federal regulation under the Safe Drinking Water Act, with the EPA providing states with minimum requirements for underground injection control ("UIC") programs. 49 A state retained primary regulatory authority of the activity unless the EPA determined that its UIC program did not meet those minimum requirements, which included inspection, monitoring, and record-keeping standards as well as prohibitions against state agencies authorizing any rule that endangered drinking water sources.⁵⁰ But in 2005, the Safe Drinking Water Act was amended by Congress specifically to exempt from the definition of underground injection the "underground injection of fluids or propping agents (other than diesel fuels) pursuant to hydraulic fracturing operations related to oil, gas, or geothermal production activities."51 Since this amendment, regulation of fracking for oil or gas production has been the exclusive domain of state authorities.

C. New York's Regulatory Scheme

1. Statutory Underpinnings

Regulation of the natural gas drilling industry in New York is governed by Article 23 of the Environmental Conservation Law. That statute commits to the state Department of Environmental Conservation ("DEC") the authority to promulgate rules overseeing the development and implementation of natural gas extraction, treatment, and transportation.⁵² As discussed above, DEC regulations are meant to provide for development according to several stated policy objectives: first, to prevent waste; second, to provide for a greater recovery of gas; third, to protect fully the correlative rights of all owners; and finally, to protect fully the rights of all persons including landowners and the general public.⁵³

The DEC's regulations, in turn, are subject to certain requirements contained in New York's State Environmental Quality Review Act ("SEQRA").⁵⁴ SEQRA requires that state agencies consider the environmental impact of any activity subject to discretionary approval before issuing a permit.⁵⁵ Thus, when an action is deemed to have a potentially significant impact, the DEC is required to draft

an Environmental Impact Statement ("EIS"). Once a draft EIS is available, it must be posted for a comment period of at least thirty days, allowing the public to voice any potential concerns to agency decision makers and project sponsors.⁵⁶

Rather than consider each activity's environmental impact on a case-by-case basis, the DEC has standardized its assessments through two mechanisms: the Environmental Assessment Form ("EAF") and the Generic Environmental Impact Statement ("GEIS"). The EAF allows permit applicants to provide the DEC with the details of a specific proposed activity's estimated environmental impact rather than requiring agency analysis of every proposal. ⁵⁷ A GEIS allows the DEC to complete one EIS for an entire class of activities, rather than demanding a separate EIS for each individual proposal within the class. ⁵⁸ Public comment period is solicited once, prior to the adoption of the GEIS, rather than prior to the issuance of each individual permit. ⁵⁹ Once released, the GEIS covers virtually all projects within the class.

Until recently, proposed gas wells in New York were covered by a GEIS promulgated in 1992. The 1992 GEIS determined that the issuance of a standard individual oil or gas well drilling permit anywhere in the state, when no other permits are involved, was a "non-significant action" under SEQRA.⁶⁰ In 2008, anticipating increased instances of horizontal drilling and high-volume hydraulic fracturing in the State, the DEC determined that these practices warranted further review.⁶¹ The DEC resolved to develop a Supplemental GEIS ("SGEIS") to address three key factors distinguishing these practices from more conventional drilling: "(1) required water volumes in excess of GEIS descriptions, (2) possible drilling in the New York City Watershed, in or near the Catskill Park, and near the federally designated Upper Delaware Scenic and Recreational River, and (3) longer duration of disturbance at multi-well drilling sites."62 A draft SGEIS was published in September of 2009.63 In response to additional research and extensive public comment on the draft, the DEC continued to revise the SGEIS through the summer of 2011. A Preliminary Revised Draft SGEIS ("prdSGEIS") was released in July of 2011;64 a further revision was issued in September. 65 As of this writing, the DEC has not yet released a finalized version of the SGEIS. For purposes of its analysis, this article assumes that the prdSGEIS will be adopted without substantial alteration and that its terms will govern the issuance of permits for new hydraulic fracturing wells in the post-moratorium period.⁶⁶ This Note does not pretend to possess the scientific expertise necessary to present an opinion on the sufficiency or efficacy of these measures.

2. The Regulatory Life-Cycle of a Natural Gas Well⁶⁷

a. Birth: Permitting and Unitization

The process of complying with New York State regulations to begin drilling for natural gas is relatively

straightforward. As a threshold matter, an operator must first demonstrate that it is a legitimate organization with adequate financial security,⁶⁸ but broadly speaking, the process consists of just two steps. First, the operator must establish a "spacing unit" for the project. Once the project is unitized, the operator may then apply to the DEC for a well permit.⁶⁹

The DEC defines a spacing unit as "the geographic area assigned to the well for the purposes of sharing costs and production." The prdSGEIS provides three options for standard unitization of hydraulic fracturing wells, but anticipates that "multi-well pads"—spacing units that allow for the drilling of multiple horizontal wells—will be the most commonly utilized.⁷¹ The prdSGEIS also allows for the drilling of additional wells from separate locations within a spacing unit "with justification." These are known as "infill" wells. 73 The initial wellbore must be approximately centered in the spacing unit, and no wellbore inside the unit may be within 330 feet of a unit boundary.⁷⁴ Because the standards for spacing units were the subject of public comment in the generic EIS, no public comment period is necessary for the DEC to establish a new unit that conforms with those standards.

As an alternative to the standard spacing requirements, the prdSGEIS allows for variances and non-conforming spacing units when such an allowance satisfies the policy objectives of Section 23-0301—that is, preventing waste and achieving a greater recovery of gas. ⁷⁵ In the event that the DEC wishes to grant a permit to a non-conforming spacing unit, it must open the proposal for a period of public comment and, potentially, an adjudicatory hearing. ⁷⁶

For a proposed spacing unit to be valid, the operator must control at least 60 percent of the acreage contained within it.⁷⁷ The remaining 40 percent—up to 256 acres—need not be controlled at the time of application. This uncontrolled portion of the proposed unit may be brought under the operator's control through the processes of voluntary or compulsory integration.⁷⁸

Once a proposed spacing unit has been established, the operator may proceed with the application process. The application itself is just two pages long, requiring only the essential details concerning the proposed well, including its location, type, and target formation.⁷⁹ Along with the application, the operator must submit a fee, 80 as well as several supporting documents. First, the operator must submit a survey map showing the proposed well's location, the boundaries of the lease containing the well, and information on any wells nearby. The operator must also present a map showing the proposed spacing unit and an affirmation that it controls drilling rights in 60 percent of that unit. Finally, the operator must submit a document describing the proposed drilling program and a form assessing its likely environmental impact on the area. 81 All of these documents are prepared by the applicant and, though the DEC inspects the service location

to determine whether it is an appropriate site for drilling, the DEC itself conducts no site-specific testing prior to issuance of a permit.⁸² In the case of multi-well pads, the DEC may elect not to re-inspect the site prior to issuing a permit to drill a new well.⁸³

b. Adolescence and Maturity: Site Preparation and Operation

Actual operation of a well is subject to more complex regulation including record-keeping and monitoring requirements, inspection, and testing for environmental compliance. Under the prdSGEIS, any permit issued for hydraulic fracturing will be dependent on the operator meeting an elaborate set of conditions.⁸⁴ At the outset, an operator must create a series of environmental impact plans, an emergency response plan, develop a road use agreement with the municipality, and properly prepare the site for industrial activity.⁸⁵ A number of conditions require periodic compliance over the well's lifetime. For example, prior to any initial site disturbance or subsequent drilling, an operator must conduct tests of residential water wells within 1,000 feet of the well pad. These tests must be conducted by a certified commercial laboratory, not by the DEC, and must continue periodically until a year after the last fracking on the well pad occurs.86

The prdSGEIS contains extensive regulations covering site maintenance, drilling, and stimulation—the process of actually fracking the well.⁸⁷ Some of these regulations concern what materials are allowable to conduct a given activity. For example, handling and containment of produced water on the well pad requires steel tanks, 88 and only properly labeled biocides—additives used to kill bacteria—may be used for any operation.⁸⁹ Other regulations prescribe specific procedural mandates for drilling and fracturing operations. Required procedural conditions must be followed for the monitoring of the unused depth of fluid storage pits—known as "freeboard" monitoring⁹⁰—as well as the removal of fluids from those pits. 91 Additional conditions mandate "[a]ppropriate pressure control procedures" during drilling⁹² and detailed procedures for the actual fracturing of a well.⁹³ The operational regulations extend to record-keeping and reporting requirements. Records must be kept of the site's storm-water pollution protection plan ("SWPPP"), 94 the adequacy of the well's cement bond, 95 all pressure tests conducted, 96 all formations penetrated, 97 and any freshwater, brine, oil, or gas encountered during drilling.98 Furthermore, the operator must maintain a detailed record of the hydraulic fracturing operation and that log must be available for inspection by the DEC upon request.⁹⁹ This record must include "all types and volumes of materials, including additives, pumped into the well, flowback rates, and the daily and total volumes of fluid recovered during the first 30 days of flow from well." 100 Operators are required to report to the DEC before commencing surface casing cementing operations, ¹⁰¹ before using any previously unreviewed chemical products, 102

and upon the occurrence of "[a]ny non-routine incident." 103

c. Death: Plugging and Abandonment

Nor is terminating the operation of a well free from regulation. An operator may not abandon a well, even temporarily, without notification to the DEC and compliance with agency regulations. 104 When an operator wishes to plug and abandon a well permanently, it must provide the DEC with formal notice of its intention to abandon at least ten days in advance of commencing the procedure. The DEC then issues a permit and arranges for a representative from the DEC to be present to witness the plugging. 105 Before the drilling site may be abandoned legally, the operator must satisfy the DEC that the well has been plugged in accordance with DEC regulations, including that the well bore itself has been filled with cement "from total depth to at least 15 feet above the top of the shallowest formation from which the production of oil or gas has ever been obtained in the vicinity." 106

Apart from closure of the well itself, the surrounding area must also be reclaimed according to DEC regulations. The prdSGEIS specifies that the removal of fluids from the site must take place within forty-five days of the completion of operations. ¹⁰⁷ The operator must consult with the DEC before disposing of any cuttings containing chemical additives. ¹⁰⁸ Finally, the prdSGEIS requires that the operator scarify the affected land to alleviate compaction before restoring, seeding, and mulching the topsoil. ¹⁰⁹

The permit conditions and operational regulations listed above are non-exhaustive, but provide some idea of the scope and focus of the DEC's regulatory structure and its emphasis on post-permitting regulation, supervision, and reclamation.

II. Inherent Contradictions and Policy Conflicts

Some of the contradictions inherent in New York's natural gas mining statute are plain from a hard look at the statute itself. Further contradictions become apparent when the regulatory framework is examined in the context of cases that have arisen in other states with practical experience in regulating high-volume hydraulic fracturing. This Section will examine each of the statute's stated policy aims, present several of the more illuminating cases, and enumerate the specific internal contradictions that they reveal in New York's approach.

A. Prevention of "Waste"

The first stated policy objective of Article 23 of the Environmental Conservation Law is to regulate the production of gas "in such a manner as will prevent waste." ¹¹⁰ Article 23 includes an explicit definition of "waste" that does not seem to extend to waste products or environmental waste. Specifically, the Article's definition is limited to "[p]hysical waste, as that term is generally

understood in the oil and gas industry," and waste which, through inefficiency, results in the loss of oil and gas that would otherwise be recoverable. It Industry glossaries do not offer an indication of what might be meant by "physical waste," 112 but the remaining context of the Article strongly suggests that the definition is meant to be limited to either the actual, physical loss of oil and gas or the diminishment of potential recovery. Article 23's enforcement provision lists as its chief offense, quite succinctly, that "[i]t shall be unlawful for any person to: 1. Waste oil or gas." 113 Title 21 of Article 23, New York's codification of the Interstate Compact to Conserve Oil and Gas, reinforces this understanding of the term. It states that "[t]he purpose of this compact is to conserve oil and gas by the prevention of physical waste thereof from any cause." 114

By contrast, the prdSGEIS developed by the DEC evidences a broader, more conventional understanding of the term waste. It mandates disposal and treatment procedures for the cuttings created during drilling, the liner of storage pits, the millions of gallons of "flowback" or produced water, production brine, and solid residual waste. It The 2009 draft SGEIS referenced studies by the Ground Water Protection Council ("GWPC"), an association of regulators in other states, whose findings on hydraulic fracturing waste disposal focus on produced water, not the physical waste of oil or gas. It As the study indicates, "[a]pproximately 98% of all material generated from oil and gas [exploration and production] operations in the U.S. is produced water."

The generation of produced water creates a number of environmental waste concerns. Most obviously. the recovery, storage, and transport of produced water are highly susceptible to spillage. 119 Spillage not only necessitates soil remediation in the area where the spill occurred, but also increases the risk of contamination of nearby water resources. 120 But even when no spillage occurs, handling such large volumes of toxic material has a significant environmental impact. Most particularly, there is the question of the final disposal of the produced water. Some produced water is re-injected into deep underground disposal wells, where it can potentially affect sources of drinking water. 121 Much of the produced water, though, is sent to treatment facilities. The sheer volume of water to be moved demands that hundreds of tanker trucks be employed to transport the waste generated in a single fracturing. Purely in terms of the subsequent carbon dioxide emissions, this amount of traffic will leave a substantial environmental footprint over time. Unfortunately, potential problems do not stop after shipment. The capacity of waste that any one treatment facility may process is limited by the prdSGEIS, and a facility can be punished for accepting waste that exceeds its capacity or that contains chemicals it is not equipped to treat. 122 Samples from Pennsylvania and West Virginia raise an additional concern that exposure to chemical additives and naturally occurring elements of underground rock

formations may render produced water untreatable by existing facilities. 123

Confronted with such large quantities of waste, New York facilities may either reach capacity or simply be unable to treat produced water effectively. In such an eventuality, the disposal options that remain open to operators are unclear. They may be forced to ship their produced water out of state for treatment or injection elsewhere. Since much of the water will have been pumped out of freshwater sources within New York State, removing it from the local hydrologic cycle could significantly impact the State's ecology. 124 It is also possible that in the face of disposal difficulties operators will be tempted to discharge produced water directly into the environment in violation of DEC regulations. Whatever the ultimate outcome, given the tremendous volume of produced water likely to be generated by extensive fracking in the New York Marcellus, the legislature should address the issue. To ignore the ramifications of both solid and liquid waste products as a matter of policy by excluding them from the statutory definition of waste is a gross error.

B. Correlative Rights and Rights of Landowners

This Section will explore the related concepts of correlative rights and the rights of landowners. It will begin by identifying these rights as they are generally understood and the methods employed by the statute to protect them. Contrasting New York's approach with that of two other states, it will conclude that an inherent tension exists between these two policy aims and that the legislature should clarify for the courts which policy interest it believes to be paramount.

1. Correlative Rights

Correlative rights, the protection of which is Article 23's second stated policy aim, are not explicitly defined in that Article. The correlative rights doctrine is generally defined as one limiting the rights of landowners in a common underground source to a reasonable share, typically based on the amount of surface area owned by each. The term is perhaps most commonly used to refer to the rights of landowners in a common resource such as groundwater. Each owner must limit his or her use of the resource to a proportional share, preventing one owner from draining the resource and depriving his or her fellow owners of its use. 126

In the context of gas extraction, this means that each landowner inside of a particular spacing unit is entitled to a share of the gas extracted from the entire unit in proportion to the amount of acreage owned, regardless of any single well's productivity. In theory, this practice protects the rights of an owner to the resource that lies under her land without requiring her to sink a new well and extract the gas herself.

2. Rights of Landowners

Article 23 claims as its next policy objective the full protection of "the rights of all persons including landowners."127 The methods chosen to achieve this objective, detailed in Titles 7 and 9 of the Article, indicate that the rights referred to are, primarily, a landowner's correlative rights as discussed above. Titles 7 and 9 provide, respectively, for the voluntary¹²⁸ and compulsory¹²⁹ integration and unitization of oil and natural gas pools and fields. The first step in creating a spacing unit takes place at the time an operator applies for a permit to drill. 130 For the spacing unit to be approved, the operator/applicant need control only 60 percent of the acreage contained within it. 131 Once a spacing unit has been established, owners of the separate interests within that unit may elect either to integrate interests voluntarily or, if "necessary to carry out the policy provisions...of this article," by compulsion of the DEC. 132 The specific policy provisions to which this section of the statute refers are not identified. One must assume, since compulsion by its very nature indicates a limitation on a person's right to refuse, that 23-0901 does not refer to the provision that claims to protect fully the rights of landowners. The practice of compulsory integration reveals an inherent contradiction in Article 23. The statute at once claims to protect landowners' rights, but denies landowners the right to refuse to integrate their land into a spacing unit.

Compulsory Integration

Once compelled to join a spacing unit subject to drilling, a landowner's rights are limited to the ability to choose between three options. He or she may elect to become either an "[i]ntegrated participating owner," an "[i] ntegrated non-participating owner," or an "[i]ntegrated royalty owner." 133 If he elects to become a participating owner, he is responsible to pay his proportionate share of all costs associated with participation, including taxes and claims of third parties related to the well. 134 If he or she elects instead to become a non-participating owner, he is still responsible for his proportionate share of the costs, but that share is reimbursed to the operator out of production proceeds rather than owed to the operator prior to the commencement of production.¹³⁵ If he elects to become a royalty owner, he has no obligation to share the costs of the well, but he is still entitled to a royalty "equal to the lowest royalty...in the spacing unit, but no less than one-eighth." ¹³⁶ Thus, the landowner's rights protected by the statute are not the commonly understood rights of fee-simple ownership, but are rather limited to the rights of a landowner to participate in a drilling operation and assert a claim for a proportional royalty under the correlative rights doctrine.

It is clear from the terms of the statute that a landowner may not refuse to have her land integrated into a spacing unit. Less clear is what rights the statute grants to an operator over the land once that land has been integrated. The practice of compulsory integration, in conjunction with the correlative rights doctrine, focuses primarily on sub-surface rights. Still, the statute does not prohibit—and may be read explicitly to allow—surface disturbances of integrated land. Title 9 of Article 23 provides that "[t]he well operator, on behalf of the owner, shall be entitled to conduct all acts associated with the well and necessary facilities related thereto."137 Elsewhere, the statute describes the operations covered by an integration order as "including, but not limited to, the commencement, drilling, or operation of a well... upon any portion of a spacing unit."138 As such, though it may not occur regularly in practice, an operator could theoretically drill on compulsorily integrated land against the landowner's will and still be in statutory compliance. Given the potential money to be made by extracting natural resources, theoretical loopholes in the regulatory structure can be expected to turn into practical transgressions, as demonstrated by the experiences of other states.

3. The Fracking Pioneers: Correlative Rights and Landowners' Rights in Texas and Oklahoma

Where correlative rights are granted to individual landowners but large extraction companies dominate the market, conflicts of interest are likely to arise. Demonstrative examples of these conflicts are readily seen in two cases that arose in Oklahoma and Texas, respectively.

a. Correlative rights

Oklahoma's high court has defined correlative rights as:

[T]hose rights which one owner possesses in a common source of supply in relation to those rights possessed by other owners in the same common source of supply....[I]t must be emphasized that [the] common source of supply in which the owners of mineral interests possess correlative rights is the underlying geological strata...rather than the well through which the oil and gas is reduced to possession.¹³⁹

Thus as a rule, to protect the common source of supply, the State Commission set "allowables"—restrictions on the amount of gas an individual well could produce despite its potential productivity. Still, in the case of *Sinclair Oil & Gas Co. v. Corp. Commission*, the court recognized that exceptions to this rule were often necessary, finding

the necessity of draining such reservoirs with a minimum of waste[] as more important than attempting to guarantee to any owner or operator that his permitted well or wells will produce the precise quantity of gas which some may predict to be in place under the entire surface area of his land. 140

In *Sinclair*, owners whose wells exhibited lesser productivity brought suit against the Commission for allowing owners of wells with greater productivity to extract gas in excess of their allowable share. ¹⁴¹ The court recognized that the opposed interests—prevention of waste and protection of correlative interests—could not be reconciled without one giving ground to the other. The court deemed it in the public's best interest to minimize waste rather than protect owners' rights in the profits of an inferior well. ¹⁴²

New York's regulatory system handles this problem deftly, at least as far as the interests of persons whose land is within a spacing unit are concerned. Under New York law, owners share the proceeds from all gas recovered on a given spacing unit according to the percentage of land they own within that unit. The productivity of an individual well, or its location on one parcel rather than another, does not affect the amount to which the owners of those parcels are entitled. Take, for example, a spacing unit consisting of two parcels of land of equal size. A well on parcel A turns out to be incredibly productive, but another well on parcel B yields only modest recovery. Under a system of allowables, operator A would be forced either to limit the amount he extracted from the productive well, or apply for an exemption. In New York, owners A and B share the profits of the two wells equally. When adjacent parcels are not within the same spacing unit, however, New York's system is vulnerable to other policy conflicts.

b. Landowners' Rights

It is unfortunate but likely that a policy of protecting individual landowner's rights regardless of environmental waste will lead to disreputable, though not necessarily prohibited, behavior on the part of extractors. In Texas, the recent case of Coastal Oil & Gas Corp. v. Garza Energy *Trust*¹⁴³ presented just such a situation. In that case, the defendant extractor owned a parcel of land directly adjoining another parcel on which it merely held a lease. 144 Drilling yielded an exceptionally productive well on the leased parcel, recovering gas on which the defendant was required to pay a royalty. It was in the defendant's best interest as the owner of the adjacent parcel to recover as much of the gas underneath the productive well from the adjacent parcel as possible. Consequently, the defendant drilled a number of infill wells on its own parcel as near to the border with the productive parcel as allowed by law. 145 The defendant then extensively fracked the wells on its own parcel, causing a significant amount of the gas from the productive parcel to drain across the boundary to the adjacent wells. 146

One salient issue raised by *Coastal Oil* was whether the penetration by hydraulic fracturing of an adjoining parcel of land constitutes a trespass allowing for recovery of damages in the amount of the value of the gas drained.¹⁴⁷ To resolve such an issue, one must first determine which policy concern—the rights of landowners or the prevention of waste—one wishes to prevail. The out-

come then depends on whether one's definition of waste is limited to the physical waste of the gas itself or broadened to include environmental waste. The facts of *Coastal Oil* present another strong argument for the expansion of the definition of waste to include environmental factors other than the loss of gas. The amount of gas recovered would be the same whether it was drawn from the naturally productive parcel or the adjacent, heavily fracked parcel. If one could recover the same amount of gas without contaminating millions of gallons of water, the use of that water can only be described as wasteful.¹⁴⁸

If the rights of landowners are to be protected fully, an action in trespass for such an incursion would be imperative. The landowner protected by such an action in a case like Coastal Oil would be the owner of the productive parcel, who is entitled to the profits from the resource trapped beneath his land. The operator should not be permitted to deny those profits to the landowner by using fracturing to free the gas and recover it on the other side of a boundary. But if instead the chief objective is the prevention of waste, allowing an action in trespass for fracking over a boundary would be counter-intuitive. Imagine a situation where a high producing well could easily recover a greater amount of gas by extending its reach beyond a boundary line through fracking. If this act were to be regarded as a trespass, gas that would otherwise be recoverable would be lost, creating waste.

In *Coastal Oil*, the Supreme Court of Texas held that the rule of capture precluded any damages for drainage caused by hydraulic fracturing. ¹⁴⁹ The Court's reasoning depended largely on two findings: first, that in order to recover gas from certain geological formations "hydraulic fracturing is not optional"; and second, that the practice "cannot be performed both to maximize reasonable commercial effectiveness and to avoid all drainage. Some drainage is virtually unavoidable." ¹⁵⁰ The Texas Court opted to hold in favor of the greater recovery of oil and gas, but by relying on the rule of capture it recognized that it did so at the expense of landowners whose assets were drained away.

Even had the Court reached the opposite outcome, the issue raised in *Coastal Oil* would still make clear that simultaneous support for these two policy positions is not tenable. Given that New York's regulations allow for the drilling of infill wells within 330 feet of a spacing unit boundary¹⁵¹ and that hydraulic fracturing wells can extend as far as 5,000 feet,¹⁵² situations similar to those outlined in *Coastal Oil* are likely to arise. New York's legislature must provide guidance to the courts that will have to decide these controversies as to which policy the State favors. If the State wishes to protect the rights of landowners regardless of potential waste, it should allow for a cause of action in trespass for sub-surface fracturing. If, however, the State prefers the policy of achieving a greater recovery of gas while minimizing waste, sub-

surface fracturing to achieve that recovery should not constitute a trespass.

C. Rights of the General Public

Finally, Article 23 provides for the full protection of the rights of "all persons including...the general public." ¹⁵³ As the political entity in closest contact with any local community, the municipality is the body in the best position to discern the will of the public and defend local public interests. As such, the power of local governments to determine what procedures may be imposed on industry to safeguard local resources must be made clear.

1. Municipal Rights

The rights of the public as they might be embodied in local municipalities are expressly limited by New York's drilling statute. Title 3 of Article 23 states that "[t]he provisions of this article shall supersede all local laws or ordinances relating to the regulation of the oil, gas[,] and solution mining industries," 154 but does not provide an explicit definition of what it means by the term "regulation," particularly with regard to the term's scope. Nor does the statute completely foreclose local government jurisdiction. It goes on to specify that its provisions do not supersede "local government jurisdiction over local roads or the rights of local governments under the real property tax law." 155 By allowing some local government jurisdiction to remain intact and failing to define clearly which local actions are superseded, the legislature has left the door open for localities to challenge the limits on their remaining power. Recent experience in Pennsylvania suggests that without more explicit statutory guidance, this battle will be fought in the courts.

2. Brethren in the Marcellus: The Rights of the General Public in Pennsylvania

Due to the controversial nature of hydraulic fracturing, local populations will most likely attempt to find a means of exerting influence on local drilling activities above and beyond the regulations imposed by State statute. Across New York's southern border in Western Pennsylvania, the hydraulic fracturing "gas rush" quickly created a flurry of action in Pennsylvania courts as various municipalities sought to enact or enforce local laws when drilling operations moved in. As in New York, the governing statute in Pennsylvania purported to supersede local jurisdiction over natural gas extraction. It read: "No ordinances or enactments adopted pursuant to the aforementioned acts shall contain provisions which impose conditions, requirements[,] or limitations on the same features of oil and gas well operations regulated by this act or that accomplish the same purposes as set forth in this act."156

But Pennsylvania's attempt to supersede local jurisdiction on questions of drilling regulation was not perceived by the courts as absolute. In *Huntley & Huntley, Inc. v. Borough Council*, Pennsylvania's high court distin-

guished between provisions imposing conditions on a well's function and those addressing only its location and found that municipalities were capable of enacting the latter. ¹⁵⁷ If such a distinction were to apply in New York, municipalities could potentially wield significant power over natural gas regulation, redefining the spacing provisions handed down by the State agency.

New York law, as it stands, does not provide a clear indication of the direction courts will be likely to take. On the one hand, there is Envirogas, Inc. v. Town of Kiantone, in which a court shot down a local bond ordinance cloaked as a zoning provision and levied against drillers. 158 Conversely, there is the more recent case of Gernatt Asphalt Products, Inc. v. Town of Sardinia, 159 in which the court arrived at an outcome similar to the function/location dichotomy of Huntley & Huntley. In Gernatt, which dealt with solid mineral extraction, not gas, the Court of Appeals considered the issue of whether a municipality may use its zoning authority to eliminate mining as a permitted use in all of its districts. 160 Title 27 of Article 23—the same Article that governs gas extraction—contained a supersession provision similar to that contained in Title 3.161 The court found that general regulations of land use. like zoning ordinances, "are not the type of regulatory provision the Legislature foresaw as preempted...; the distinction is between ordinances that regulate property uses and ordinances that regulate mining activities." 162 The court went on to say:

A municipality is not obliged to permit the exploitation of any and all natural resources within the town as a permitted use if limiting that use is a reasonable exercise of its police powers to prevent damage to the rights of others and to promote the interests of the community as a whole. ¹⁶³

Using this reasoning, courts could easily extrapolate that Title 3's supersession provision, with its exception for enactments under the real property tax law, is similar to the one at issue in *Gernatt* and therefore "does not preempt the Town's authority to determine that mining should not be a permitted use of the land within the Town." ¹⁶⁴ Theoretically, then, a community that was opposed to the practice of hydraulic fracturing could subvert the DEC's unitization and permitting process by closing off productive land to drilling operations.

A New York municipality might also attempt to circumvent Article 23's supersession clause by exploiting its exception for jurisdiction over local roads. On this subject, a recent Texas case is instructive. In *Texas Citizens for a Safe Future and Clean Water v. Railroad Commission*, ¹⁶⁵ the Court of Appeals found that the state regulatory agency's focus "only on the increased recovery of oil and gas" was "too narrow a view of 'the public interest.'" ¹⁶⁶ The court required the agency to consider the locality's position on heavy truck traffic on small, rural roads as being contrary

to the public interest. ¹⁶⁷ The Texas Supreme Court subsequently overruled. ¹⁶⁸ The court found that the statute's use of the term "public interest" was ambiguous, entitling the agency's construction of that term to deference. ¹⁶⁹ These discordant opinions highlight the ambiguity in New York's statute and the need for legislative clarification. If New York's regulatory agency or courts were to adopt a broad interpretation of the rights of the general public referred to in Article 23, a municipality could properly use its local road jurisdiction to prohibit heavy truck traffic on the roads within a spacing unit. This would effectively deprive the permit-holder of the supplies necessary to conduct operations and prevent either drilling or fracking to go forward.

Whether it is through a land-use prohibition or strict traffic controls, municipal power might readily bring the protection of the rights of the general public directly into opposition with the policy aim of achieving a greater recovery of natural gas. Unless the legislature addresses what, specifically, the scope of Article 23's supersession clause covers and what power remains in the hands of local governments, these questions will be wrestled with in courts on a case by case basis. The time that thwarted extractors will be forced to spend bogged down in litigation with whole counties or individual townships is time they might otherwise spend producing energy resources for the people of New York.

III. Resolution/Proposed Alternatives

This Section offers a series of discrete solutions to the issues raised in the analysis above.

A. A More Inclusive Definition of "Waste"

First and foremost, in light of the unique situation of New York's shale beds in the midst of vital environmental resources, the legislature should amend Article 23's definition of waste to include more than just the loss of potential gas production. If the definition as it currently stands is meant to include more than this limited understanding of waste, its language is not sufficiently specific to make that clear.

The statutory definition of the term waste should be amended to incorporate the broader understanding of the term evidenced in the prdSGEIS.¹⁷⁰ It should include environmental waste and the waste products subject to regulatory disposal standards. These include cuttings from drilling, pit liners, solid residuals, and, most importantly, flowback or produced water.¹⁷¹ As written, Article 23 fails to address any type of environmental waste. A complete balancing of the various policy aims of the Article requires that environmental waste be considered in addition to the actual loss of gas or the diminishment of potential recovery. The statute should be amended to reflect this additional consideration.

B. Correlative Rights and The Rights of Landowners

1. Compulsory Integration

a. Amendment of Article 23's Policy Aims

The legislature should amend the policy provisions of Article 23 to more accurately reflect that in practice the rights of landowners are subservient to the State's interest in achieving a greater recovery of gas. The mechanism of compulsory integration, where a landowner may decide only how her land will be integrated, not whether it will be integrated, casts this contradiction into sharp relief. 172 A statute that allows for land to be compulsorily integrated but simultaneously claims to protect the rights of landowners is at best disingenuous. The clause containing the claim should either be removed or language should be added to clarify that the landowners' rights are protected only to the extent that the landowner is entitled to recover a proportional royalty of revenue derived from use of her land under the correlative rights doctrine.

Alternatively, if the legislature wishes sincerely to preserve the policy aim of protecting the rights of landowners, the practice of compulsory integration must be done away with. Among the rights that landowners possess in their land is the right to keep that land free from industrial drilling.¹⁷³ If the State wishes to preserve that right, it cannot compel owners to allow drilling on or under their land, regardless of the interest of the State in greater recovery.

b. The Rights of Operators on Integrated Land

If the practice of compulsory integration is to continue, the legislature must specify what rights operators have over integrated land. Under the terms of the statute at present, operators could conceivably conduct more than subsurface intrusions on an integrated property. The statute does not explicitly prohibit an integrated property being subjected to surface disturbances. As such, an unwilling landowner's property might be used for storage of produced water, storage in open pits of cuttings contaminated with chemical additives, truck access, parking, or even actual drilling. A court finding that the statute allows such activities could deny the landowner any recourse. 174

As of this writing, no incidents of surface disturbance of integrated land have been recorded. Once the moratorium on hydraulic fracturing in the state is lifted, however, and drilling activities increase, private sector operators will be looking to maximize their profits. Rather than wait for a transgression—or a series of transgressions—to reveal the extent of the gap in the statutory language, the legislature should address the question of what rights permit-holders have over integrated land before the moratorium on fracking is lifted.

2. Subsurface Fracturing and the Issue of Trespass

To save the issue of whether subsurface fracturing constitutes a trespass from a long and arduous period of litigation, the legislature must specify which policy aim it values more highly: landowners' rights or the prevention of waste in achieving the greater recovery of gas. If the legislature addresses that question, resolving the trespass issue is simple. If landowners' rights are to be paramount, any subsurface incursion by fracking should be considered a trespass and the owner should be entitled to recover for the gas extracted from his land by fracking. If, however, the greater recovery of gas is to prevail, subsurface incursion by fracking should not constitute a trespass so long as it is done to minimize waste. The New York legislature should adopt the latter approach.

Rights of the General Public: A Clear Standard of Local Authority

Finally, the legislature should amend Article 23 to provide local governments with a clear, definitive standard of the jurisdiction they retain under the Article's supersession clause. The legislature could avoid much confusion and a great deal of litigation simply by defining the term "regulation" in that clause, clearly delineating what powers remain available to local authorities. In light of the outcomes of *Huntley & Huntley* in Pennsylvania's high court and Gernatt in New York's, lawmakers should anticipate that many municipalities will likely attempt to regulate the location of drilling activities and the traffic to and from drilling sites. In some communities, these regulations may be so strict as to amount to a prohibition on fracking. If it is the legislature's intention to grant local governments that power, an amendment clarifying that intention will be helpful for both local governments and the courts who are certain to hear the industry's inevitable challenges to such restrictions. If lawmakers do not wish for municipalities to have that power, an amendment stating as much will deter improper attempts at local regulation and prevent the majority of those challenges.

Conclusion

New York's system of regulating the process of hydraulic fracturing under the Mineral Resources Law is both thorough and comprehensive. The system's flaw lies in attempting to achieve policy goals that bear inherent contradictions. Because of the highly controversial nature of the subject, regulation of hydraulic fracturing will continue to receive a great deal of attention as the moratorium on the practice is lifted. With modest effort, New York's legislature can correct a number of the law's internal contradictions and anticipate issues that are likely to arise. The discrete amendments to Article 23 suggested above will save an untold amount of time and resources otherwise certain to be expended by administrative agencies, courts, and the private sector. Given the State's

interests in developing its gas fields and preserving its environmental resources, New York's legislature should not hesitate to act.

Endnotes

- Laura Legere, Nearly a Year After a Water Well Explosion, Dimock Twp. Residents Thirst for Gas-Well Fix, TIMES-TRIB. (Scranton, Pa.) (Oct. 26, 2009), http://thetimes-tribune.com/news/nearly-a-year-after-a-water-well-explosion-dimock-twp-residents-thirst-for-gas-well-fix-1.365743.
- 2. Id
- 3. Id.
- Id. Pennsylvania has experienced six documented explosions caused by migrating gas in the last decade, killing four people. Contamination has affected at least 60 water wells, including three municipal water supplies. Id.
- See Abrahm Lustgarten, New York's Gas Rush Poses Environmental Threat, PRO PUBLICA (July 18, 2008, 2:42 PM), http://www. propublica.org/article/new-yorks-gas-rush-poses-environmentalthreat-722.
- 6. Id
- 7. See generally J. Daniel Arthur, et al., Water Resources and Use for Hydraulic Fracturing in the Marcellus Shale Region (2011), available at http://www.netl.doe.gov/technologies/oil-gas/publications/ENVreports/FE0000797_WaterResourceIssues.pdf.
- 8. See, e.g., U.S. ENVTL. PROT. AGENCY, EPA 816-R-04-003, EVALUATION OF IMPACTS TO UNDERGROUND SOURCES OF DRINKING WATER BY HYDRAULIC FRACTURING OF COALBED METHANE RESERVOIRS ch. 4, at 19 (2004) [hereinafter EPA IMPACT STUDY], available at http://water.epa.gov/type/groundwater/uic/class2/hydraulicfracturing/wells_coalbedmethanestudy.cfm.
- See Mireya Navarro, Gas Drilling is Severely Restricted in Catskill Watershed Supplying New York City, N.Y. Times, Apr. 24, 2010, at A15.
- 10. See Navarro, supra note 9.
- See Clifford Krauss & Tom Zeller, Jr., When a Rig Moves in Next Door, N.Y. TIMES, Nov. 7, 2010, at BU1.
- 12. See Navarro, supra note 9.
- 13. Id
- 14. See Sandy Long, America's Most Endangered River: the Upper Delaware, River Reporter (June 3, 2010), http://www.riverreporter.com/issues/10-06-03/head1-endangered.html.
- 15. N.Y.S. 8129B, 233d Sess. (2010).
- Tom Zeller, Jr., New York Governor Vetoes Fracking Bill, N.Y. TIMES GREEN BLOG (Dec. 11, 2010, 7:35 PM), http://green.blogs.nytimes. com/2010/12/11/new-york-governor-vetoes-fracking-bill.
- 17. Id
- 18. Governor Andrew Cuomo's office described reports that it would seek to reinstate the practice of fracking in July 2011 as "baseless speculation and premature." Edith Honan & Joan Gralla, New York Seeks To Lift Fracking Moratorium, REUTERS (June 30, 2011, 2:14 PM), http://www.reuters.com/article/2011/06/30/natgas-newyork-fracking-idUSN1E75T16420110630. For more on the revision of New York's regulations, see infra, Part I.C.1.
- 19. See infra, Part I.B.
- 20. This article does not seek to advocate for or against the utilization of this method by the fossil fuel extraction industry in New York State, nor to question the wisdom of the exemption of the fracking process from federal regulation. These subjects have been, and will no doubt continue to be, discussed at length by other commentators. See, e.g., Hannah Wiseman, Untested Waters: The Rise of Hydraulic Fracturing in Oil and Gas Production and the Need

- To Revisit Regulation, 20 FORDHAM ENVIL. L. REV. 115 (2009); Laura C. Reeder, Note, Creating a Legal Framework for Regulation of Natural Gas Extraction from the Marcellus Shale Formation, 34 Wm. & Mary Envil. L. & Pol'y Rev. 999 (2010); Aaron Stultz Heishman, Recent Development, Recent Developments in Environmental Law, 23 Tul. Envil. L.J. 561 (2010).
- 21. N.Y. Envtl. Conserv. Law § 23-0301 (McKinney 2011).
- 22. Id
- 23. See Energy Info. Admin., U.S. Dep't of Energy, DOE/EIA-TR-0565, Drilling Sideways—A Review of Horizontal Well Technology and Its Domestic Application 1–2 (1993), available at ftp://ftp.eia.doe.gov/petroleum/tr0565.pdf.
- 24. See, e.g., Marcellus Shale: The Environmental Review Process for Natural Gas Exploration in the Marcellus Shale, N.Y. STATE DEP'T OF ENVIL. CONSERVATION [hereinafter Marcellus Shale], http://www.dec.ny.gov/energy/46288.html (last visited Apr. 15, 2012).
- 25. The total costs of extraction, from exploration through to production, transport, storage, and distribution, are incredibly high and have increased over the last several decades. The nominal cost per natural gas well drilled in 2008 is nearly 50 times what it was in 1960. See Energy Info. Admin., U.S. Dep't of Energy, DOE/EIA-0383(2009), Annual Energy Review 2009 112 fig.4.8 (2010), available at http://wilcoxen.maxwell.insightworks.com/pages/3427/oil-mdc-data.pdf.
- 26. N.Y. STATE DEP'T OF ENVTL. CONSERV., PRELIMINARY REVISED DRAFT: SUPPLEMENTAL GENERIC ENVIRONMENTAL IMPACT STATEMENT ON THE OIL, GAS, AND SOLUTION MINING REGULATORY PROGRAM ch. 5, at 24–25 (2011) [hereinafter PRDSGEIS], available at http://www.dec. ny.gov/data/dmn/ogprdsgeisfull.pdf.
- 27. *Marcellus Shale, supra* note 24. Common proppants include sand, resin-coated sand, aluminum pellets, and man-made ceramics. A proppant is typically selected because its permeability is greater than the rock in the surrounding formation.
- 28. Id
- 29. Id.
- 30. The number of large shale plays in the United States, most notably the Bakken, Barnett, Montney, and Haynesville formations, have made the United States a world leader in natural gas production. See Natural Gas: An Unconventional Glut, Economist, Mar. 13, 2010, at 12. This abundance has led some to call America "the Saudi Arabia of natural gas." Joe McKendrick, America, the Saudi Arabia of Natural Gas, SMARTPLANET (Mar. 18, 2010, 9:13 AM), http://www.smartplanet.com/business/blog/business-brains/america-the-saudi-arabia-of-natural-gas/5606.
- See Chesapeake Energy, Hydraulic Fracturing Facts: Water Usage, HYDRAULIC FRACTURING, http://www.hydraulicfracturing.com/ Water-Usage/Pages/Information.aspx (last visited Apr. 15, 2012).
- 32. *Id.* Using the ranges provided by industry, the variance between the potential minimum and maximum amount of water usage is notable. Calculated using the numbers at the smaller end of the range, the minimum amount of water used over the life of a well is 965,000 gallons. The numbers from the higher end of the range, though, yield an estimated water usage of 6.9 million gallons of water for a single well. In the information it supplies to the public on the subject, New York's Department of Environmental Conservation provides numbers decidedly nearer to the bottom of this range. *Marcellus Shale, supra* note 24 ("Each well may use more than one million gallons of water.").
- 33. See PRDSGEIS, supra note 26, ch. 5, at 98.
- 34. Abrahm Lustgarten, Buried Secrets: Is Natural Gas Drilling Endangering U.S. Water Supplies?, ProPublica (Nov. 13, 2008, 2:00 PM), http://www.propublica.org/article/buried-secrets-isnatural-gas-drilling-endangering-us-water-supplies-1113 ("'It is like Coke protecting its syrup formula for many of these service companies[.]'" (quoting Scott Rotruck, Vice President of Corporate Development at Chesapeake Energy)).

- 35. On benzene, see U.S. Dep't of Health & Human Servs., *Testing Status Benzene 10389-Y*, NAT'L TOXICOLOGY PROGRAM, http://ntp.niehs.nih.gov/index.cfm?objectid=BCB630F7-123F-7908-7BB1B8384496F5B8 (last visited Apr. 15, 2012); on ethylene, see *id.* at http://ntp.niehs.nih.gov/ntp/roc/twelfth/profiles/EthyleneOxide.pdf.
- 36. EPA IMPACT STUDY, supra note 8, ch. 4, at 15, 17.
- 37. Id. ch. 4, at 15-16.
- 38. Id. ch. 3, at 5-6.
- 39. Id. ch. 7, at 5.
- 40. Id. ch. 7, at 6.
- 41. Id. ch. 7, at 5.
- 42. See PRDSGEIS, supra note 26, ch. 5, at 98-99, 118, 120, 123, 130-31.
- 43. See Galen Sanford, 'Produced' Water an Economic Opportunity,
 GREENTECH MEDIA (May 13, 2010), http://www.greentechmedia.
 com/articles/read/produced-water-an-economic-opportunity/.
- 44. See EPA IMPACT STUDY, supra note 8, ch. 4, at 16.
- 45. Id.
- See, e.g., Sources of Oil and Gas Pollution, EARTHWORKS, http://www.earthworksaction.org/airpollutionsources.cfm (last visited Apr. 15, 2012).
- 47. Id
- 48. See U.S. Dep't of Health & Human Servs., supra note 35.
- Legal Envtl. Assistance Found. v. EPA, 276 F.3d 1253, 1255 (11th Cir. 2001).
- 50. Id. at 1264; see also 42 U.S.C. § 300h-4(a)-(b) (2006).
- 51. 42 U.S.C. § 300h(d)(1).
- 52. N.Y. ENVTL. CONSERV. LAW § 23-0305(8) (McKinney 2011).
- 53. Id. § 23-0301.
- 54. See id. §§ 3-0301(1)(b), (2)(m), 8-0113.
- 55. See N.Y. Comp. Codes Rules & Regs. § 617.7 (2011).
- 56. See id.
- 57. See ENVTL. CONSERV. § 8-0109(2); Defreestville Area Neighborhoods Ass'n v. Town Bd., 299 A.D.2d 631, 632–34, 750 N.Y.S.2d 164, 166–67 (3d Dep't 2002); see also N.Y. COMP. CODES RULES & REGS. § 617.9 (2011); SEQR: Environmental Impact Assessment in New York State, N.Y. STATE DEP'T OF ENVTL. CONSERVATION, http://www.dec.ny.gov/permits/357.html (last visited Apr. 15, 2012).
- 58. N.Y. COMP. CODES RULES & REGS. § 617.10.
- 59. Id
- 60. N.Y. State Dep't of Envil. Conservation, Final Generic Environmental Impact Statement on the Oil, Gas and Solution Mining Regulatory Program § II.A, tbl.1(a) (July 1992), available at ftp://ftp.dec.state.ny.us/dmn/download/geismaster.pdf.
- 61. PRDSGEIS, supra note 26, ch. 1, at 4–5.
- 62. N.Y. STATE DEP'T OF ENVIL. CONSERVATION, DRAFT: SUPPLEMENTAL GENERIC ENVIRONMENTAL IMPACT STATEMENT ON THE OIL, GAS AND SOLUTION MINING REGULATORY PROGRAM ch. 1, at 4 (2009) [hereinafter 2009 DSGEIS], available at ftp://ftp.dec.state.ny.us/dmn/download/OGdSGEISFull.pdf.
- 63. See generally id.
- 64. See PRDSGEIS, supra note 26.
- 65. The Revised Draft SGEIS was issued on September 7, 2011, and was open for public comment until January 11, 2012. *See* http://www.dec.ny.gov/energy/46288.html.
- 66. The draft SGEIS for high-volume hydraulic fracturing exempts a proposed fracking well from site-specific SEQRA determinations and therefore from periods of comment by the local public—unless it falls within one of seven particular categories. Projects only

require individual assessment where: (1) the target is shallower than 2,000 feet; (2) the target is less than 1,000 feet below the base of a known fresh water supply; (3) the proposal contains a centralized flowback water surface impoundment not previously approved; (4) the well pad is within 300 feet of a reservoir, stem, or controlled lake; (5) the well pad is within 150 feet of a private water well or other watercourse; (6) the project anticipates a significant reduction in the flow or habitat of nearby surface waters; or (7) the location is within 1,000 feet of subsurface water supply infrastructure. See 2009 DSGEIS, supra note 62, ch. 8, at 2–3. Whether this limitation on allowing the public to comment on individual wells further compromises Article 23's stated aim of fully protecting the rights of the public is too broad-reaching a question for this article.

- 67. The term "life-cycle" is used only as an analogy to present the reader with familiar stages of existence: birth, maturity, and death. In many ways, the term is inappropriate because gas wells do not share the characteristics of living things. They are not alive, nor are they part of any natural cycle.
- 68. Well Permitting Process: Well Permitting Requirements To Drill,
 Deepen, Plug Back and Convert for Oil, Gas, Solution Salt Mining and
 Other Regulated Wells, N.Y. STATE DEP'T OF ENVIL. CONSERVATION,
 http://www.dec.ny.gov/energy/1772.html (last visted Apr.
 16, 2012). An operator may demonstrate financial security by
 submitting a Bond form, letter of credit, or similar financial
 document. Financial Security, N.Y. STATE DEP'T OF ENVIL.
 CONSERVATION, http://www.dec.ny.gov/energy/1622.html (last
 visited Apr. 16, 2012). Assuming that they maintain sufficient
 financial security, companies already on file with the DEC need
 not repeat this step with each and every application.
- Drilling Permit Application, N.Y. STATE DEP'T OF ENVIL. CONSERVATION, http://www.dec.ny.gov/energy/1783.html (last visited Apr. 16, 2012).
- 70. PRDSGEIS, supra note 26, ch. 5, at 17 n.16.
- 71. Id. ch. 5, at 30.
- 72. Id. ch. 5, at 24.
- 73. Id. glossary, at 10. The drilling of infill wells is justified if "necessary to satisfy the policy objectives of section 23-0301." N.Y. ENVTL. CONSERV. LAW § 23-0503(4) (McKinney 2011). The term "infill drilling" is understood in the industry to refer to the "[a]dd[ition of] new wells in an existing field...to accelerate recovery or to test recovery methods." See, e.g., Infill Drilling Definition, OILGASGLOSSARY.COM, http://oilgasglossary.com/infill-drilling.html (last visited Apr. 16, 2012). Presumably, then, a demonstration by the operator that an additional well would either accelerate recovery or achieve a greater recovery of gas is sufficient to justify additional drilling. See Envtl. Conserv. § 23-0301.
- 74. ENVTL. CONSERV. § 23-0501(1)(b)(1)(vi).
- 75. *Id.* § 23-0503(3)(a); PRDSGEIS, *supra* note 26, ch. 5, at 17.
- 76. PRDSGEIS, supra note 26, ch. 5, at 24.
- 77. ENVTL. CONSERV. § 23-0501(2).
- Id. § 23-0501(2)(b). The process of integration is discussed at length infra, Part II.B(2).
- 79. N.Y. STATE DEP'T OF ENVIL. CONSERVATION, APPLICATION FOR PERMIT TO DRILL, DEEPEN, PLUG BACK OR CONVERT A WELL SUBJECT TO THE OIL, GAS AND SOLUTION MINING LAW, available at http://www.dec. ny.gov/docs/materials_minerals_pdf/dril_req.pdf.
- 80. Drilling Permit Application, N.Y. State Dep't of Envil.

 Conservation, http://www.dec.ny.gov/energy/1783.html (last visited Apr. 16, 2012). The amount of the fee due is dependent on the depth of the proposed well.
- 81. Id
- 82. See PRDSGEIS, supra note 26, ch. 8, at 47–48. Discretionary activities require an environmental impact assessment in accordance with the State Environmental Quality Review ("SEQR") and 6 NYCRR

- Pt. 617, but these assessments are now standardized through the required—and operator-prepared—Environmental Assessment Form. *See SEQR: Environmental Impact Assessment in New York State*, N.Y. STATE DEP'T OF ENVIL. CONSERVATION, http://www.dec.ny.gov/permits/357.html (last visited Apr. 16, 2012).
- 83. See PRDSGEIS, supra note 26, ch. 8, at 47-48.
- 84. See id. app. 10 at 1-13.
- 85. Id. app. 10 at 1-3.
- 86. Id. app. 10 at 2; id. ch. 7, at 46.
- 87. See id. app. 10 at 3-11.
- 88. Id. app. 10 at 10.
- 89. *Id.* app. 10 at 6; see also id. glossary, at 1-2.
- 90. Id. app. 10 at 3; see also id. glossary, at 8.
- 91. Id. app. 10 at 3.
- 92. Id. app. 10 at 4.
- 93. *Id.* app. 10 at 9–10.
- 94. Id. app. 10 at 3.
- 95. Id. app. 10 at 7-8.
- 96. Id. app. 10 at 8.
- 97. Id. app. 10 at 12.
- 98. Id. app. 10 at 8.
- 99. Id. app. 10 at 10.
- 100. Id.
- 101. Id. app. 10 at 7.
- 102. Id. app. 10 at 8.
- 103. Id. app. 10 at 12.
- 104. See N.Y. Comp. Codes Rules & Regs. § 555.3(a) (2011) (prohibiting temporary abandonment for a period longer than 90 days).
- 105. Id. § 555.4(b).
- 106. Id. § 555.5(a)(1).
- 107. See PRDSGEIS, supra note 26, app. 10 at 11.
- 108. Id
- 109. Id. app. 10 at 12.
- 110. N.Y. Envtl. Conserv. Law § 23-0301 (McKinney 2011).
- 111. *Id.* § 23-0101 ("Waste means a. Physical waste, as that term is generally understood in the oil and gas industry; b. The inefficient, excessive or improper use of, or the unnecessary dissipation of reservoir energy; c. The locating, spacing, drilling, equipping, operating, or producing of any oil or gas well or wells in a manner which causes or tends to cause reduction in the quantity of oil or gas ultimately recoverable from a pool under prudent and proper operations, or which causes or tends to cause unnecessary or excessive surface loss or destruction of oil or gas; d. The inefficient storing of oil or gas; and e. The flaring of gas produced from an oil or condensate well after the department has found that the use of the gas, on terms that are just and reasonable, is, or will be economically feasible within a reasonable time."); *see also* N.Y. Comp. Codes Rules & Regs. § 550.3(ax) (2011).
- 112. See Oil & Gas, AlphaDictionary.com, http://www.alphadictionary.com/directory/Specialty_Dictionaries/Oil_,038_Gas (last visited Apr. 16, 2012); see also Results for Waste Definition, OilGasGlossary.com, http://oilgasglossary.com/?s=Waste (last visited Apr. 16, 2012).
- 113. N.Y. Envtl. Conserv. Law § 71-1305(1) (McKinney 2011).
- 114. Id. § 23-2101(1).
- 115. Both definitions of "waste" should be distinguished from the term of art used in property law to describe acts which cause "an irreparable injury to the reversioner." Jackson v. Brownson, 7

Johns. 227 (N.Y. Sup. Ct. 1810). Under traditional waste doctrine, total extraction of a valuable resource from the land by anyone but the landowner would always constitute waste. Because the Environmental Conservation Law seeks to allow gas-drilling lessors to extract as much of the resource as possible, the statute cannot mean to adopt this understanding of the term. For a detailed look at the evolution of waste doctrine in property law, see Jedediah Purdy, *The American Transformation of Waste Doctrine: A Pluralist Interpretation*, 91 CORNELL L. REV. 653 (2006).

- 116. PRDSGEIS, supra note 26, ch. 5, at 129-34.
- 117. See 2009 DSGEIS, supra note 62, ch. 5, at 147 (citing Ground Water Prot. Council, et al., State Oil and Natural Gas Regulations Designed To Protect Water Resources (May 2009) [hereinafter GWPC Report], available at http://www.gwpc.org/e-library/documents/general/State%20Oil%20and%20 Gas%20Regulations%20Designed%20to%20Protect%20Water%20 Resources.pdf).
- 118. GWPC REPORT, supra note 117, at 30 (footnote omitted).
- 119. PRDSGEIS, supra note 26, ch. 6, at 18.
- 120. Id.
- 121. Id. ch. 5, at 131.
- 122. Id. ch. 6, at 55, 59, 61.
- 123. Id. ch. 6, at 56.
- 124. See, e.g., Robert B. Jackson et al., Water in a Changing World, 9 ISSUES IN ECOLOGY 1, 3-9 (Spring 2001), available at http://www.epa.gov/owow/watershed/wacademy/acad2000/pdf/issue9.pdf.
- 125. Black's Law Dictionary 396 (9th ed. 2009).
- 126. Id.
- 127. N.Y. ENVTL. CONSERV. LAW § 23-0301 (McKinney 2011).
- 128. Id. § 23-0701(1).
- 129. Id. § 23-0901(1).
- 130. See supra Part I.C(2)(a).
- 131. Envtl. Conserv. § 23-0501(2).
- 132. Id. § 23-0901(2).
- 133. See id. § 23-0901(3)(a)(1)-(3).
- 134. See id. § 23-0901(3)(a)(2), (3)(c)(1)(ii)(A).
- 135. See id. § 23-0901(3)(a)(1). A non-participating owner is also assessed a "risk penalty" of two-hundred percent of his share of actual costs. Id.
- 136. See id. § 23-0901(3)(a)(3). An integrated owner who makes no election is deemed to be a royalty owner.
- 137. $Id. \S 23-0901(3)(c)(1)(ii)(I).$
- 138. Id. § 23-0901(3)(f).
- 139. Samson Res. Co. v. Corp. Comm'n, 702 P.2d 19, 22 (Okla. 1985).
- 140. 378 P. 2d 847, 853 (Okla. 1963).
- 141. Id. at 850-51.
- 142. Id. at 852-53.
- 143. 268 S.W.3d 1, 4 (Tex. 2008).
- 144. Id. at 5.
- 145. *Id.* at 6.
- 146. *Id.* at 7 ("[T]he frac[k]ing of the Coastal Fee No. 1 and No. 2 wells was...'massive'....").
- 147. Id. at 4.
- 148. The primary dictionary definition of "waste" is to "use or expend carelessly, extravagantly, or to no purpose." Waste, New Oxford American Dictionary (3d ed. 2010).

- 149. Coastal Oil, 268 S.W.3d at 17.
- 150. Id. at 16.
- 151. PRDSGEIS, supra note 26, ch. 5, at 22.
- 152. Id. ch. 5, at 25.
- 153. N.Y. Envtl. Conserv. Law § 23-0301 (McKinney 2011).
- 154. Id. § 23-0303(2).
- 155. Id.
- 156. 58 PA. CONS. STAT. ANN. § 601.602 (West 2011).
- 157. 964 A.2d 855, 864 (Pa. 2009).
- 112 Misc. 2d 432, 435, 447 N.Y.S.2d 221, 223 (Sup. Ct. Erie Cnty. 1982), aff'd, 89 A.D.2d 1056, 454 N.Y.S.2d 694 (4th Dep't 1982).
- 159. 87 N.Y.2d 668, 664 N.E.2d 1226, 642 N.Y.S.2d 164 (1996).
- 160. Id. at 681, 664 N.E.2d at 1234, 642 N.Y.S.2d at 172.
- 161. *Id.* at 682, 664 N.E.2d at 1234–35, 642 N.Y.S.2d at 172–73; *see also* N.Y. Envil. Conserv. Law § 23-2703(2)(b) (McKinney 2011) ("[T]his title shall supersede all other state and local laws relating to the extractive mining industry; provided, however, that nothing in this title shall be construed to prevent any local government from...enacting or enforcing local zoning ordinances or laws which determine permissible uses in zoning districts.").
- 162. Gernatt, 87 N.Y.2d at 681–82, 664 N.E.2d at 1234, 642 N.Y.S.2d at 172.
- 163. Id. at 684, 664 N.E.2d at 1235, 642 N.Y.S.2d at 173.
- 164. Id. at 683, 664 N.E.2d at 1235, 642 N.Y.S.2d at 173.
- 165. 254 S.W.3d 492 (Tex. 2007), rev'd, 336 S.W.3d 619 (Tex. 2011).
- 166. Id. at 498.
- 167. Id. at 502.
- R.R. Comm'n v. Tex. Citizens for a Safe Future & Clean Water, 336
 S.W.3d 619 (Tex. 2011).
- 169. Id. at 628-29.
- 170. See PRDSGEIS, supra note 26, ch. 5, at 130-34.
- 171. See id.
- 172. See supra Part II.B.2.a.
- 173. See Coll. Sav. Bank v. Fla. Prepaid Postsecondary Educ. Expense Bd., 527 U.S. 666, 673 (1999) (characterizing the right to exclude as the "hallmark of a protected property interest"); see also Richard A. Epstein, Property and Necessity, 13 HARV. J.L. & PUB. POL'Y 2, 3–4, 8 (1990); Lior Jacob Strahilevitz, Information Asymmetries and the Rights to Exclude, 104 MICH. L. REV. 1835, 1836 ("American courts and commentators have deemed the 'right to exclude' foremost among the property rights, with...leading property scholars describing the right as the core, or the essential element, of ownership.").
- 174. See supra notes 124–25 and accompanying text.
- 175. See supra Part II.B.3.b.

Patrick Siler graduated from St. John's University School of Law in June, 2012; B.F.A., 2003, University of North Carolina School of the Arts. Winner of the NYS-BA Environmental Law Section's 2011 Prof. William R. Ginsberg Memorial Essay Contest. First published in the St. John's University Law Review. Great thanks to Professors Mary L. Lyndon and Robert A. Ruescher for their invaluable input and direction, and to the DEC's Jennifer L. Maglienti, Esq., for her feedback.

The Argument for a National Carbon Bounty: Solving the Energy-Environment Disconnect

By Caryn Davies

Introduction

Designing an efficient environmental energy policy is an investment optimization problem. Investment optimization here means achieving the most efficient use of public and private resources, as directed through government regulation. This article argues that current policies such as renewable portfolio standards and feed-in tariffs fail to optimize investment in environmental goals because they legislate the energy means (renewable generation) and not the environmental end (emissions reduction).

The original goal of energy policy was to deliver a safe, adequate and reliable supply of electricity at the cheapest price possible. Unfortunately, regulations promulgated under this goal failed to take into account the environmental impact of generation. Lawmakers then passed environmental legislation to mitigate the damage by imposing limits on power plant emissions.

As Lincoln Davies notes in *Alternative Energy and the Energy-Environment Disconnect*, the result of this policy evolution was two bodies of law with opposing regulatory goals governing the same industry. "Energy law hoped to keep electricity costs at a minimum, and environmental law inevitably increased them." ³

It has become increasingly apparent that an effective environmental energy policy must combine the goals of energy law and environmental law.⁴ The purpose of this article is to propose an integrated policy that provides the maximum emissions reduction for the minimum extra

The first section of this article, Part I, defines the boundaries of the issue by drawing a clear line between reducing carbon emissions and increasing renewable generation capacity. It then outlines the inability of current renewable energy policy to address emissions reduction goals in a cost-efficient manner.

Part II illustrates a new method for quantifying success in emissions reduction. This new methodology utilizes the concept of marginal carbon intensity to evaluate the environmental impact of new projects, thereby allowing us to design regulatory mechanisms that accurately reflect environmental concerns.

Part III proposes a novel mechanism designed to solve the energy-environment disconnect in a way that optimizes investment. Putting a positive price on carbon dioxide (CO_2) displaced from the existing power system in the form of a "carbon bounty" ensures resource allocation to projects most efficient at reducing total greenhouse

gasses, thereby achieving both the environmental policy goal of emissions reduction and energy policy goal of cost control in a single regulatory mechanism.

I. The Need for Clearly Defined Goals

What should be the goal of an integrated environmental energy policy? Only after we have identified the proper goal of an integrated regime can we evaluate policies effectively and allocate resources appropriately.

Supply-side regulatory initiatives focus mainly on promoting the development of renewable energy sources.⁵ However, few stop to ask why it is we are encouraging renewables. What is the main goal behind these renewable energy initiatives?

Renewable energy offers several main advantages: inexhaustible capacity, energy independence, price certainty, and emissions reduction. All of these are worthy goals to pursue. But how can we ensure that we are using societal resources efficiently in pursuit of these goals?

Before we can write policies to encourage investment optimization, we must decide which of these desirable outcomes is most relevant to the problem at hand and the policy in question. If climate change is the primary environmental concern, then reducing carbon emissions should be the primary goal of an integrated environmental energy policy.

Let us start with the assumption that the goal is to avoid the most CO_2 emissions (hereafter referred to as "carbon emissions") for the least amount of money. This section will argue that renewables are not always the most cost-effective way to accomplish emissions reduction. Accordingly, subsidies focused on renewable power generation such as renewable portfolio standards and feed-in tariffs do not optimize the use of public funds when measured in carbon emissions avoided per dollar spent.

A. Increased Renewable Energy Versus Reduced Carbon Emissions

Utilizing renewable sources of energy produces fewer carbon emissions than does burning fossil fuels. Yet it is a mistake to conflate renewable generation with emissions reduction.

Increasing the percent of renewable capacity in an electricity generation portfolio is not the only way to reduce carbon emissions. Non-renewable measures such as increased energy efficiency have the potential to reduce carbon emissions as much as or more than renewables.

Nor do all renewable generation projects avoid the same quantity of carbon emissions per MWh: as discussed in Part II of this article, the emissions reduction depends on location and time of operation. This means that some renewable projects offer more emissions reduction than others.

Because renewable energy and emissions reduction are not the same thing, money spent on renewable technologies does not necessarily equal money spent on emissions reduction. Practical limitations and cost considerations can make renewables a poor vehicle for investment optimization.

To give an example, renewables are limited in their potential to meet demand requirements. Intermittency prevents technologies such as wind power from being used as a baseload generator, while uncertainty in resource availability prevents technologies such as solar from being used as a peak load generator. This means that there are times and places where other technologies offer greater emissions reduction. Nuclear power, for instance, provides clean energy without the dispatch limitations of renewable power.

In some cases, the cheapest method to accomplish emissions reduction is actually a fossil fuel. Natural gas burns with half the emissions of coal.⁷ A new natural gas plant does not need a large subsidy to compete with existing capacity because it offers a reliable power source for a relatively low cost. Indeed, natural gas is already starting to replace coal in the U.S. market.^{8,9} If converting two coal plants to natural gas is cheaper than replacing one coal plant with wind, then the most cost-effective emissions reduction would be accomplished with natural gas.¹⁰

Advancements in storage technology may eventually solve the limitations of renewable resources. Until that time, however, the optimal use of societal resources would be to invest in other technologies that offer cheaper emissions reductions. As will be discussed further in Part II, these technologies include efficiency measures and transmission upgrades in addition to cleaner generation capacity. The novel proposal in Part III will encompass measures aimed at supply (renewables), demand (efficiency), and everything in between (transmission) in one integrated policy.

B. The Problem With Current Policies

There are many inherent limitations of any policy focused on renewable generation, and most of these are well documented elsewhere. 11 Rather than simply reiterate the limitations of various approaches, this section will visit some of the assumptions behind supply-side regulatory mechanisms such as renewable portfolio standards and feed-in tariffs and demonstrate why they do not always result in the most efficient emissions reduction. It then proposes a new paradigm for promulgating energy regulations to meet environmental goals.

Since the goal is to reduce emissions, the question when designing an efficient environmental energy policy therefore becomes: how much are we paying for each ton of carbon avoided? Approaching the problem in this way shows us that current policies aimed at increasing renewable generation capacity fail to address carbon emission goals in a cost-effective manner.

Renewable energy policies dictate either the amount of each renewable technology (a renewable portfolio standard, or "RPS") or the price at which it will be secured (a feed-in tariff, or "FIT"). This sort of planned market economy results in inefficiencies at each step of the process.

The first step in designing an RPS is to decide which renewable technologies to subsidize. Current and proposed measures define narrowly which technologies qualify. For example, the Waxman-Markey bill lists solar, wind, geothermal, biomass, hydropower, and marine hydrokinetic. 12 Yet favored technologies change, and "regulators have a particularly poor track record in choosing technological winners." In addition, singling out existing technologies undermines the goal of encouraging innovation and accompanying economic development.

The RPS policymaker must then decide how much of each designated technology can be mandated without violating the statutory requirement of "just and reasonable" pricing. 14 Some states set targets too low to make much of a difference in emissions, 15 while others set targets too high and risk non-compliance in places where it is prohibitively expensive due to lack of renewable resources. 16 Note that while renewable energy credits can theoretically relieve this pressure, a national market in renewable energy credits means that renewable projects will get built where they are cheapest, not necessarily where they will avoid the most emissions by displacing the most carbonintensive generation.

Likewise, the first step in designing a FIT is selecting technologies to subsidize. The second step is to determine a price that encourages renewable development without overly distorting the market. Unfortunately, lawmakers have proven unable to estimate the amount of subsidy necessary to reach the desired capacity.

Spain instituted a feed-in tariff in 2007 with the goal of increasing solar generation to 400 megawatts by 2010.¹⁷ That goal was surpassed by the end of 2007, and another 2.5 gigawatts came online in 2008. The offtake price was clearly too high, as even inefficient, poorly designed plants could make a profit at \$0.58 cents per KWh. Eventually the government could not afford the entitlement it had created and the program had to be modified, leaving many investors without the returns they had been promised.

The inability of current renewable policies to meet environmental goals in a cost-effective manner suggests that it is time to reconsider prescriptive energy policies mandating the use of renewable generation. This article proposes instead to move forward with a descriptive energy policy: one that describes the end result we wish to achieve (carbon reduction) and allows the market to map out the best road to that end, whether via increased use of renewables or other emissions-reducing measures.

The following sections of this article first identify a new way to quantify steps toward the goal of carbon reduction and then propose a regulatory mechanism to optimize investment in that goal.

II. A New Way to Quantify Success

As with any regulatory goal, we must have a metric to measure steps toward that goal. In this case, the goal is emissions reduction. Thus, when planning a clean(er) power generation project, the most important question to ask is, "How many units of carbon emissions will it help avoid?" Similar questions should be asked about transmission upgrades and efficiency programs. This section describes a model to measure the effect of new projects on the emissions of the system as a whole.

A. Emissions Avoidance

The concept of evaluating projects by the carbon emissions they displace is already approved under the Kyoto Protocol. The Clean Development Mechanism (CDM) allows signatories to fund clean energy projects in developing countries in lieu of paying for emissions reduction in their own country. ¹⁸ CDM thus encourages efficient resource allocation by choosing projects that maximize the carbon displaced for the money spent no matter where in the globe they are found.

Why does it matter where the clean energy project is located? Why might building new renewable generation in China displace more carbon than the identical project in France? Similarly, why might conserving a MWh through increased efficiency in China avoid more emissions than the identical measure in France?

Avoidance of carbon emissions is temporally and spatially dependent because it depends on what type of generation is being replaced. Power in China is likely to come from a coal plant, whereas in France it is likely to come from nuclear plant. In terms of total emission, there is a difference between building a wind farm to displace the generation capacity of a coal plant versus a nuclear plant. Similarly, there is a difference between conserving the power that comes from a coal plant versus a nuclear plant.

At the same time, local transmission and operational constraints mean that, for any given project, it may not be possible to displace the source of generation with the highest emissions rate in the local power system. Thus, in order to determine the effect of new projects on total emissions, you must know the characteristics of the electricity generation, transmission, and distribution system as a whole.

So how does one go about measuring carbon displacement in a complicated system? The answer lies in the concepts of marginal carbon intensity, marginal carbon offset, and shadow carbon intensity. These three concepts were developed by energy economists at Charles River Associates while doing an analysis of the costs and benefits involved in transmission upgrades for the Southern Power Pool. 19 They provide "a vocabulary and arithmetic [to] help power industry stakeholders...better understand the economics and operational consequences of CO₂ emissions within the complexity of the interconnected power grid." 20

Marginal Carbon Intensity as a Model to Measure the Effect of Consumption on Emissions

Each megawatt hour consumed (and, conversely, each one conserved) has a different marginal impact on the carbon emissions of the whole electrical generation system. *Marginal carbon intensity* (MCI) provides a way to measure this impact.

MCI is defined as "the decrease in carbon emissions in the electrical network in response to an infinitesimal decrease in electricity demand," measured in tons of CO_2 per megawatt hour (t/MWh).²¹ It can be expressed mathematically by the following equation:

$$MCI_{node} = \frac{\partial (CO_2)_{system}}{\partial (Demand)_{node}}$$

Calculating the marginal carbon intensity is similar to calculating locational marginal prices (a concept upon which deregulated energy markets are based). As with locational marginal prices, MCI is time and geographic location dependent due to the constrained transmission network.

In the case of marginal pricing, the marginal cost of electricity is set by the cost of the marginal generator; in the case of marginal carbon, the marginal rate of emissions is determined by the emissions intensity of the marginal generator. The marginal generator is the plant that will turn its power output up or down in response to changes in the load at any given time and place.

Sometimes the MCI of a particular electricity consumer is counter-intuitive. For example, environmentalists hailed Yahoo's new data center in Lockport, NY as a green success because it is powered by clean energy from nearby Niagara Falls.²²

What these environmentalists failed to realize is that placing a data center next to a hydro plant is not necessarily any better than placing it next to a coal plant. Although the nearest power plant is a renewable source with an emissions rate of zero, the MCI in Lockport is not necessarily zero.

The emissions effect of increased load next to a hydro plant depends on the marginal generator. The marginal generator will be the generator with the lowest locational marginal price for that time and location. It is the generator with excess capacity that can be deployed to meet the extra load demand for the least cost.

A hydro plant without the ability to store water—such as Niagara Falls—will always operate at full capacity because its fuel costs are zero, and therefore its marginal costs are lower than power plants burning fossil fuels. ²³ Accordingly, because the hydro plant has no excess unused capacity, it is not the marginal generator. Increasing the load nearby will not increase the electricity output of the hydro plant.

The MCI for a location near a hydro plant such as the Niagara Power Project is dependent on the next cheapest option for generation capacity and its associated emissions rate per megawatt hour produced. If the marginal generator in Lockport happens to be a nearby coal plant, the MCI for the data center is the emissions rate of the coal plant. In other words, Yahoo may as well have built its data center across the road from said coal plant: the effect on emissions would have been the same.

The fact that the marginal carbon intensity can vary depending on time and location means that not all efforts to reduce load demand are equally effective at reducing emissions. Ideally, efficiency measures should be preferentially planned for locations with a high annual average marginal carbon intensity. In instances where location is pre-determined, the timing of power usage can be varied. Offering real-time MCI information would allow consumers to plan conservation efforts to coincide with the time of day exhibiting the highest MCI. In this way, the same amount of money spent on demand reduction could accomplish more emissions reduction.

2. Marginal Carbon Offset as a Model to Measure the Effect of Generation on Emissions

Just as *marginal carbon intensity* measures the effect of changes on the demand side, *marginal carbon offset* (MCO, or "the offset") measures the effect of changes on the supply side. It answers the question, "What is the carbon offset provided by incremental renewable generation, or more generally, by any generation deployed at a given location at any point in time?"²⁴

The MCO of a generator measures the net impact of a particular generator's activities on system-wide carbon emissions. It is the difference between the MCI at a generator's location and the generator's CO_2 emission rate. This equation can be expressed mathematically as follows (where α^C =marginal carbon offset, MCI=marginal carbon intensity, σ =emissions rate of the generator, t=time, and k=location):

$$\alpha_k^C(t) = MCI_k(t) - \sigma_k(t)$$

Like MCI, the calculation of MCO is temporally and spatially dependent because the determination of the marginal generator hinges on those parameters. In other words, location and time of operation determines how effective the new generation capacity will be at displacing carbon emissions.

When evaluating a proposed generation project, the annual average MCI should be calculated based on its location. For example, analysis done as part of the Charles River Associates study referenced above shows that the round-the-clock annual average MCI in the Midwest is approximately twice that of the Northeast due to the fuel mix in each area. The marginal unit of power in the Midwest is more likely to come from coal plants as compared with the Northeast (Figure 1).

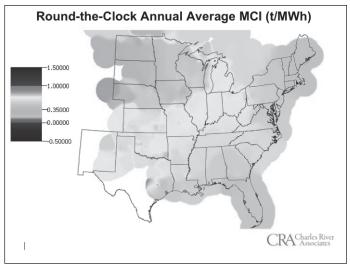


Figure 1

Accordingly, a wind farm built in Iowa will displace twice the carbon emissions as compared to one built in New York (Figure 2).

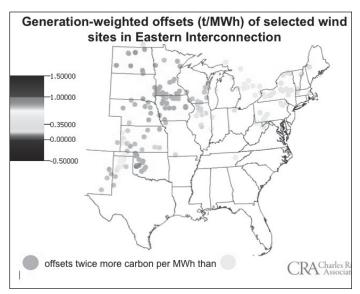


Figure 2

This means that a dollar of subsidy given to a wind generator in the Midwest would buy twice the carbon reduction as compared to a dollar given to a wind generator in the Northeast. By using this data in decision-making, the same amount of money spent on clean generation could result in greater emissions reductions.

3. Shadow Carbon Intensity as a Model to Measure the Effect of Transmission on Emissions

Transmission constraints impact the carbon emissions of the system as a whole. They are part of what determines marginal carbon intensities because the MCI at a given time and location must account for the re-dispatch needed to accommodate the load change in a congested power system. In other words, all other things being equal, the constraints of the transmission system determine which generator is on the margin.

When planning transmission upgrades it would be useful to ask which constraints have the greatest impact on the emissions of the system as a whole. The concept of shadow carbon intensity (SCI) can answer this question.

Shadow carbon intensity is defined as the reduction in CO_2 emissions in response to an infinitesimal increase in the capacity of the constraining transmission line, measured in tons per megawatt hour. It is related to MCI in the same way shadow prices are related to locational marginal prices, and can be calculated using the same fundamental equation. Upgrades to transmission lines with the greatest shadow carbon intensity will provide the greatest emissions reduction—a consideration that should be taken into account in the planning and approval process.

The fact that not all efficiency, generation, and transmission projects are created equal when it comes to emissions reduction illustrates the need for an integrated environmental energy policy. The next section will propose a regulatory mechanism incorporating the concepts of marginal carbon intensity, marginal carbon offset, and shadow carbon intensity to maximize investment in emissions reduction.

III. A Novel Policy Proposal

An efficient environmental energy policy designed to combat climate change should incorporate the concept of marginal carbon intensity in order to achieve maximum emissions reduction. A recent paper published by Charles River Associates demonstrates how a RPS incorporating marginal carbon intensity information will avoid more emissions than does the current RPS regime. Yet there is a more direct and also more comprehensive way to approach the problem.

A. The Carbon Bounty as a New Emissions Reduction Strategy

Why not pay developers directly for the emissions they avoid by placing a bounty on carbon? And why not make transmission upgrades and efficiency measures also eligible for the carbon bounty? Such a policy would create a national market for clean energy measures across all sectors of the electricity industry. In this way, a single mechanism can facilitate carbon emissions reduction in the most cost-effective manner regardless of the method used.

What is a "carbon bounty" exactly? It is the opposite of a carbon tax. Instead of taxing the generators that emit carbon, it would pay the generators that prevent it from being released into the atmosphere. Likewise, it would pay the utilities that reduce emissions through the addition of new transmission capacity. Finally, it would offer money to individuals who implement efficiency and/or conservation measures according to their impact on carbon emissions.

This article proposes placing a nationwide bounty on carbon emissions in the electricity market. The proposed carbon bounty is essentially a subsidy for new projects that save carbon.

How does a project save carbon? It depends on the project.

A project that reduces consumption due to efficiency or conservation measures saves carbon by reducing demand on the power system, thereby decreasing total emissions. The carbon saved will be measured according to the annual average marginal carbon intensity of the project's location: this average marginal carbon intensity (expressed in tons per megawatt hour) will simply be multiplied by the amount of power the measure is capable of conserving per year, resulting in a value representing tons of carbon saved per year. This value would be recalculated every year for the life of the project.

In order for a generator to save carbon, it must operate such that the electricity it produces displaces the output of other more emission-intensive generators in the system, thus lowering the total amount of carbon emissions. The generation technology could be renewable, but it does not have to be. The emissions avoided can be calculated by multiplying the annual average offset by the amount of power the generator is capable of injecting into the grid per year, minus any carbon emitted by the generator in question.

Similarly, an upgrade to an existing transmission system will be deemed to have saved the emissions it avoids in relieving congestion as measured by the average shadow carbon intensity of the transmission constraint.

B. The Design of a Carbon Bounty

When evaluating a climate change policy, the three most important aspects are efficiency, equity, and ease of implementation.²⁷ The policy must also offer breadth, flexibility, and continuity in order to be effective.²⁸ Let us consider how the proposed carbon bounty meets the test of efficiency, equity, and ease of implementation while also providing breadth, flexibility, and continuity.

1. Efficiency

The fact that a particular project costing a specified amount will be better at reducing carbon emissions if you place it in one area of the country versus another clearly exposes the inefficiencies of current renewable policies that subsidize renewable generation no matter where it is built. In contrast, a pay scale directly correlated to progress towards the goal optimizes investment by definition. Accordingly, when it comes to emissions reduction, a carbon bounty is more efficient than renewable policies in place today.

How much would the carbon bounty payout be? It has been suggested previously that a price of \$12 per metric ton of CO_2 would be appropriate for a carbon tax. ²⁹ This is an approximation of the price needed to meet a reasonable target for emissions reduction. Given, however, that a carbon bounty optimizes investment in emissions reduction, one would expect the price to be lower.

One way to determine the price would be to hold a yearly reverse auction for carbon. First lawmakers set the reduction goal, and then the auction price drops until enough bidders (in this case, prospective project developers) drop out that the target emissions reduction is accomplished in the most cost effective manner.

2. Equity

Where would the money to pay for a subsidy going to carbon avoiders come from? Taking it out of the general tax revenue would be the most equitable because it would amount to a progressive rather than a regressive tax. A progressive tax is one that increases with income. In contrast, a regressive tax falls disproportionately on the people least able to bear the cost.

Policies that increase the price of power, such as a carbon tax or an RPS, amount to a regressive tax because the burden, when measured as a proportion of income, falls disproportionately on the poorest individuals. For example, a \$15 per ton carbon tax would amount to 3.74% of income for the bottom income decile, but only 0.81% for the top.³⁰

In contrast, a carbon bounty would actually decrease the price of power in some places. If the project in question does not change the generator on the margin, it will not change price. If the re-dispatch required to accommodate the new project changes the generator on the margin to a cheaper source (as it would in most cases), it would reduce prices. A carbon bounty funded by general taxation revenue is thus effectively a progressive subsidy to the clean energy industry.

3. Ease of Implementation

A national carbon bounty would be relatively easy to implement. In deregulated markets the Independent System Operators (ISOs) already calculate locational marginal price when managing the spot market; it would be simple to add code to the marginal price algorithms al-

lowing them to also calculate marginal carbon intensities, marginal carbon offsets, and shadow carbon intensities. All one need know is the rate of emissions for each generator in the system. 32

4. Breadth

An integrated environmental energy policy is most effective when it is national in scope.³³ Accordingly, federal jurisdiction over the carbon bounty policy proposed in this article is appropriate for practical reasons. Federal jurisdiction is also appropriate for legal reasons.

It is already well-established that power plant emissions are eligible for federal regulation under the Clean Air Act. In addition, a subsidy to emissions avoiders would be a legitimate exercise of the taxing and spending powers afforded Congress. Accordingly, federal jurisdiction over a national carbon bounty program should not run afoul of the Constitution.³⁴

Even though a carbon bounty would be a national mechanism, it does not have to preempt state regulations. A carbon bounty can coexist with a portfolio standard: it merely makes the cost of complying with the standard cheaper because the subsidy helps renewables to compete in the market.

5. Flexibility

An environmental energy policy must have flexibility in order to ensure an effective use of money over time. A payout apportioned using emissions reduction criteria rather than technological criteria does not favor any one method over another, and thus it has the ability to adapt to changing technology. To borrow a concept from tort law, it identifies and rewards the cheapest carbon avoider.³⁵

One important source of flexibility within the policy itself is the price per ton of emissions saved. As Spain found out with its solar feed-in tariff, creating entitlements can have disastrous consequences for the program budget. ³⁶ Just as Spain implemented a quarterly adjustment to the rate, so too must a carbon bounty allow for yearly adjustment of the price (perhaps through the reverse auction method mentioned above). The price change will only affect new projects, however, since continuity is also important to encourage investment (discussed further below).

Another source of flexibility lies within the calculation of the marginal carbon intensity and related concepts. As the system parameters change, so will the reductions offered by each actor in the system. By using annual averages to determine payouts, a carbon bounty continues to reward only the projects that continue to make a difference in emissions.

For example, if the dominant fuel in a particular area shifts from coal to renewables due to a new long-distance transmission line, a natural gas plant that previously received payments for displacing the load on a coal plant may no longer be eligible because its marginal carbon

offset may no longer positive. This flexibility allows the policy to gradually accommodate increased renewable penetration in the market as technology advances, clean energy prices come down, and other goals such as energy independence become more poignant.

While a policy must be flexible to be effective, it cannot be too flexible or it will be misused. The carbon bounty would be limited to new projects—in the case of power plants, that means either building a new plant or retrofitting an old plant (with carbon-capture technology, for example). While an existing plant may have reduced carbon emissions as compared to before it came online, it should not need any subsidies to be profitable or it would never have been built in the first place.

The decision to award a carbon bounty payment to an old plant that modifies its emissions profile will entail the same consideration as goes into the Environmental Protection Agency's concept of New Source Review.³⁷ In that way, a plant can either grandfather in permission to pollute under the Clear Air Act or it can opt to receive payments under a carbon reduction regime, but it can't game the system by claiming both.³⁸

6. Continuity

An efficient environmental energy policy must provide continuity in order to stimulate investment, both in terms of research and development and in terms of project financing. Certainty in payout assists entrepreneurs in securing financing for new projects because the lenders are looking for a guaranteed return. A carbon bounty would provide this guarantee.

The term of the subsidy for each project will be set at the time of construction, thereby assuring a predictable payout schedule. It will be sufficiently long to induce adoption of the technology in question but no longer, thereby eliminating the need to subsidize a fully depreciated asset.

Even though the price per ton of carbon saved will fluctuate yearly for new bidders, the price for successful bidders will be locked in as of the year the contract is awarded, thereby reducing political risk in carbon-saving investments.

The amount of carbon saved, however, will vary year to year. The marginal carbon intensity and related models must be recalculated every year to account for changes in the system (such as new transmission lines allowing a shift in the fuel mix toward renewables). Although this does create some uncertainty in the payout, the averages are likely to be relatively predictable, especially using a model that takes into account the possible projects stimulated by a carbon bounty policy. In addition, it is likely a secondary market will develop to hedge the volume of marginal carbon reduction over time (and therefore the size of the carbon bounty payout), thereby providing further continuity.

Conclusion

The carbon bounty proposed by this article will optimize money spent in emissions reduction by helping renewable energy generators be more competitive in the electricity market while at the same time encouraging investment in other emissions-reducing technologies.

A carbon bounty is effective in encouraging renewables because, similar to existing policies, it lowers the hurdle to compete with the installed base. As long as each generator knows its MCO and the carbon bounty price, the generator will factor this information into its variable operating costs. These costs will then be used to determine the optimal dispatch order according to particular rules of the market in which the generator operates. With a carbon bounty the generation projects that displace carbon will be cheaper than they would otherwise be, allowing them to move up in the dispatch order and compete with cheap, carbon intensive generation.

The advantage of a carbon bounty over current policy is that it levels the playing field for carbon avoidance by not favoring certain technologies over others. Transmission upgrades and efficiency measures will also be eligible for payouts, as will non-renewable clean(er) generation projects. It doesn't matter whether the new project is renewable generation, transmission upgrades, efficiency measures, or some other technology: if it's the best at reducing emissions, it gets the most money.

A carbon bounty also encourages research and development in all areas. Research would be funded by private parties as they compete to build the most efficient carbon-reducing projects, whether using renewable technology or otherwise.

This proposal is similar to a carbon tax in its scope and effect on emissions in the electricity market, yet is likely to be more palatable politically because it will be supported by a wider audience, including politically powerful actors such as the natural gas industry.

Most importantly, the carbon bounty proposed in this article allows maximum carbon reduction per dollar. As part of an integrated clean energy plan, it will facilitate many of the changes needed to fight climate change.

Endnotes

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- 3. Id at 495.
- 4. Id at 475.
- For a comprehensive review of recent regulatory initiatives, see *The Law of Clean Energy: Efficiency and Renewables* (Michael B. Gerrard ed., 2011).

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- 12. H.R. 2454 [111th] §610(a)(17).
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- See, e.g., New York State Public Service Law §65: "All charges made or demanded...shall be just and reasonable...".
- For example, Iowa requires only 105 MWhs to come from renewable sources. Lincoln Davies, *Power Forward: The Argument* for a National RPS, 42 Conn. L. Rev. 1339, 1361 (2010).
- 16. Hawaii dictates that 40% of its net electricity sales must come from renewable sources. *Id.*
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- 22. While the data center is green for other reasons, such as the design of the cooling system, undue attention has been given to its location near Niagara Falls. See, e.g., http://green.yahoo.com/blog/ecogeek/1125/yahoo-data-center-will-be-powered-by-niagara-falls.html.
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- 26. Id.
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- 28. Id
- 29. Gilbert E. Metcalf & David Weisbach, *The Design of a Carbon Tax*, 33 Harv. Envtl. L. Rev. 499 (2009). This number came from a review done in 2005 by the Intergovernmental Panel on Climate Change using 100 different studies estimating the optimal tax rate.
- 30. Metcalf & Weisbach, *supra* note 29, at 513. In order to make a carbon tax progressive instead of regressive, Gilbert and Metcalf argue that the carbon tax should finance income tax relief. However, taking the money for a carbon bounty out of the general tax revenue does essentially the same thing while also reducing the cost of administration.
- 31. While it is possible that a decrease in price may in turn increase consumption, this change will only occur up to the point where the pricier generator previously on the margin is once again on the margin; thus the increased consumption will be limited.
- 32. The MCI would be more difficult to calculate in places that are not deregulated because the informational infrastructure is not already present, but it still can be done.
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- 35. The cheapest cost avoider is a concept introduced by Guido Calibrese in his book *The Cost of Accidents* (1970).
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- 37. See http://www.epa.gov/nsr/.
- 38. Ideally the concept of grandfathering will be phased out in the future, thus eliminating the license to pollute it provides, but the concept of new source review and the case law stemming from it could still be used to evaluate whether retrofits qualify for payments under the carbon bounty.
- 39. This refers to the fact that, in order to enter the market and compete with existing generation capacity, a new plant must either be able to sell its electricity below the marginal cost of its competitors or qualify for subsidies to make up the difference.

Caryn Davies is a student at Columbia Law School (Class of 2013) and a three-time Olympic medalist in rowing (Athens 2004 silver, Beijing 2008 gold, London 2012 gold). She won third place in the New York State Bar Association Environmental Law Section 2011 William R. Ginsberg Memorial Essay Contest with this article. She will be spending her post-graduate year in Honolulu clerking for 9th Circuit Judge Richard Clifton, after which she hopes to return to New York and work in energy or environmental law. Caryn can be reached at caryn.davies@law.columbia.edu.

Echoes of *Westway*—Agency NEPA Decision Annulled for Errors in Baseline Assumptions

North Carolina Wildlife Federation v. North Carolina Department of Transportation, 677 F.3d 596 (4th Cir. 2012)

By John D. Hoggan, Jr. and David G. Carpenter

"You are entitled to your opinion. But you are not entitled to your own facts."

-Senator Daniel Patrick Moynihan

In North Carolina Wildlife Federation v. North Carolina Department of Transportation, 677 F.3d 596 (4th Cir. 2012) ("NCWF"), the Fourth Circuit Court of Appeals recently reaffirmed the applicability of this adage in the area of agency decision-making under the National Environmental Policy Act ("NEPA"). In its May 2012 decision, the Fourth Circuit held that the North Carolina Department of Transportation ("NCDOT") and the Federal Highway Administration ("FHA") violated NEPA where they "failed to disclose critical assumptions underlying their decision to build [a new twenty-mile toll road] and instead provided the public with incorrect information" regarding the baseline assumptions for the project. Many environmental lawyers will hear echoes of the Second Circuit's landmark Westway decision in the NCWF Court's reasoning.²

The facts in *NCWF* can be briefly summarized as follows: after a three-year review, NCDOT and FHA approved construction of the "Monroe Connector Bypass"—a new 20-mile toll road linking North Carolina's Mecklenburg and Union Counties. As required by NEPA, NCDOT and FHA evaluated three potential alternative scenarios, including the "no-build" or "no-action" alternative (which is intended to evaluate the environmental impacts likely to occur if the proposed action did not occur). What the agencies did, however, was evaluate a "no-build" alternative that, perplexingly enough, relied on data that assumed the existence of the Monroe Connector Bypass, the very action which was the subject of their environmental review.

It may seem incredible that an agency would include the project under consideration in the baseline "no-build" scenario, against which the significance of environmental impacts of the project are evaluated. It may seem even more incredible that an agency would fail to correct the record after such a fundamental flaw was pointed out by sister agencies, including the U.S. Fish and Wildlife Service, as well as citizen groups and other interested parties. However, that is exactly what occurred in *NCWF*:

Throughout the NEPA process, public commentators repeatedly asked the Agencies whether the "no build" baseline in fact assumed construction of the Monroe Connector. In responding to these

comments, the Agencies either failed to address the underlying issue or incorrectly stated that the Monroe Connector was not factored into the "no build" baseline.³

Despite the existence of internal agency email acknowledging the error, NCDOT and FHA issued a final Record of Decision specifically stating that the no-build scenario *did not* include data based on the completed project.

Upon approval of the project, the North Carolina Wildlife Federation, Clean Air Carolina, and Yadkin Riverkeeper filed suit to enjoin construction, contending that the agencies' review had violated NEPA. Deferring to the expertise of the agencies, the U.S. District Court for the Eastern District of North Carolina granted summary judgment to NCDOT and FHA. The Fourth Circuit, however, found that the District Court's deference was unwarranted, and held that NCDOT and FHA had failed to take the requisite "hard look" at the environmental consequences of the Monroe Connector.⁴

The *NCWF* decision highlights an important distinction in judicial review of agency action under NEPA. Generally, "[g]iven the role of the EIS and the narrow scope of permissible judicial review, the court may not rule an EIS inadequate if the agency has made an adequate compilation of relevant information, has analyzed it reasonably, has not ignored pertinent data, and has made disclosures to the public." Lead agencies implementing NEPA are, therefore, afforded broad latitude in reviewing the potential environmental impacts of proposed projects and coming to a determination as to their significance.

Despite this broad latitude, however, agencies' determinations will *not* be upheld "when they fail to disclose that their analysis contains incomplete information." An EIS is intended to provide a basis for informed public participation and comment in the environmental review process, and that purpose cannot be fulfilled when relevant information is withheld or not made available by the agency. This purpose is entitled to weight without regard to the merits of the agency's ultimate determination.

The failure to disclose the baseline error doomed the agencies' analysis in *NCWF*. As noted by the Fourth Cir-

cuit's decision, NCDOT and FHA conceded at trial that: (1) the data upon which they relied *did*, in fact, assume the existence of the Monroe Connector; (2) this fact came to their attention during the administrative process; *and* (3) they "publicly (and erroneously) denied this fact throughout the administrative process." Despite admitting these significant failures, NCDOT and FHA argued to the Court that "because they 'conducted a thorough analysis of the environmental impacts' of the Monroe Connector and 'accepted comments from the public,' [the Court] should defer to their expertise." The Fourth Circuit declined to sanction the agencies' actions, finding particular significance in the fact that the agencies had miscalculated the "critical" no-build baseline. 10

The Fourth Circuit's decision hearkened back to the Second Circuit's seminal 1983 Westway decision, in which the relevant agencies concluded that a portion of the Hudson River which would be affected by a proposed highway project was "biologically impoverished" and a "biological wasteland," when it was, in fact, an important winter habitat for juvenile striped bass. 11 In the Westway decision, the Second Circuit set forth its formulation of instructions for a trial judge reviewing a NEPA decision as follows: "If the district judge finds that the agency did not make a reasonably adequate compilation of relevant information and that the EIS sets forth statements that are materially false or inaccurate, he may properly find that the EIS does not satisfy the requirements of NEPA, in that it cannot provide the basis for an informed evaluation or a reasoned decision." 12 Thus, "materially false or inaccurate" statements are non-starters in a NEPA review. 13

In both *NCWF* and *Westway*, throughout the EIS process, environmental groups and sister agencies had repeatedly questioned the basis for the lead agencies' factual assertions contained in the EIS. In both cases, those questions were either ignored, or addressed with reiterations of the incorrect information that was being challenged. Most importantly, in both cases, the agencies had *actual knowledge* that their baseline assumptions contained incorrect information, but they neither acknowledged nor disclosed this in their environmental impact statements, and continued to publicly affirm the accuracy of their baseline data.

The practical lesson to be learned from both decisions is that lead agencies are well advised to give careful consideration to the concerns of sister agencies, particularly where such concerns are addressed to the accuracy of the lead agency's data or assumptions. This of course occurred in both *NCWF* and *Westway*—in *NCWF* the U.S. Fish and Wildlife Service questioned the EIS' factual basis for the no-build baseline scenario, and in *Westway*, the U.S. Environmental Protection Agency, the U.S. Fish and Wildlife Service and the National Marine Fisheries

Service all expressed concern about the adequacy of the lead agency's characterization of the facts underpinning the no-build baseline scenario. As stated by the Second Circuit: a "court may properly be skeptical as to whether an EIS's conclusions have a substantial basis in fact if the responsible agency has apparently ignored the conflicting views of other agencies having pertinent expertise." ¹⁴ In light of the substantial body of case law affirming the continued vitality of the Second Circuit's admonition in Westway, lead agencies conducting reviews under NEPA should heed the concerns of their sister agencies and correct any errors—especially those in the no-build baseline scenario—that come to their attention during the administrative review process.

Endnotes

- 1. Id. at 598.
- See, Sierra Club v. U.S. Army Corps of Engineers, 701 F.2d 1011 (2d Cir. 1983).
- 3. N.C. Wildlife Fed'n, 677 F.3d at 600.
- 4. Id., 677 F.3d at 604.
- 5. See Sierra Club, 701 F.2d at 1029.
- 6. N.C. Wildlife Fed'n, 677 F.3d at 603.
- 7. Id. at 604.
- 8. Id. at 602-603.
- 9. Id. at 603.
- 10. N.C. Wildlife Fed'n, 677 F.3d at 603.
- 11. Sierra Club, 701 F.2d at 1030.
- 12. Id.
- 13. Id.
- 14. Id. (emphasis added).

John D. Hoggan, Jr. (jhoggan@hogganlaw), of the Law Office of John Hoggan, PLLC, is a member of the NYSBA Environmental Law Section's Committee on Transportation and Infrastructure. Mr. Hoggan is an experienced litigator, whose practice includes the representation and counseling of developers, business owners, transportation companies, and corporations in regard to several diverse areas of law, including: business and commercial litigation, employment law and related litigation.

David G. Carpenter (dgcpllc@gmail.com), is Of Counsel to the Law Office of John Hoggan, PLLC. Mr. Carpenter is an experienced environmental practitioner with transaction and litigation experience in the areas of solid waste management, recycling, and renewable energy; federal and state statutory and administrative permit and programs; environmental quality review; and local land use and zoning.

Recent Decisions and Legislation in Environmental Law

Recent Decisions

Abbott v. Tonawanda Coke Corp., 11-CV-549S, 2012 WL 42414 (W.D.N.Y. Jan. 9, 2012)

Facts

An action initiated in state court may be removed to federal court if that court had original jurisdiction. Such a case can be heard in federal court if it is a civil action "arising under the Constitution, laws or treaties of the United States. A civil case can be heard in federal court if federal law creates the cause of action on the face of the plaintiff's well-pleaded complaint. A plaintiff's mere allegations that his or her adversaries have violated federal law do not constitute a substantial federal question if the allegations are unfounded. The party removing the case to federal court has the burden to show the case satisfies these requirements.

Procedural History

On June 6, 2011, plaintiffs initiated an action against Tonawanda Coke Corporation (a coke foundry distillation facility in Erie County, New York) and the Corporation's CEO, James Donald Crane, seeking damages for their exposure to toxic chemicals. Defendants moved to have the case removed to federal court, asserting that the complaint raised issues of federal law. They also made a motion to dismiss. Plaintiffs then filed an amended complaint which differed from the original only slightly and subsequently moved to remand back to state court. Notably, the amended complaint made no mention of the Clean Air Act, Clean Water Act, or Resource Conservation and Recovery Act in its negligence per se cause of action and instead alleged continued violations of New York State regulations.

Issue

Whether or not plaintiffs' complaint raised a substantial question of federal law and belonged in federal court.

Rationale

The determination whether or not to remand a case from federal court back to state court is based on the complaint as it was written when the notice of removal was filed. While defendants contended that many of the claims are rooted in federal statutes, namely the Clean Water Act, the Clean Air Act and the Resource Conservation and Recovery Act, the court noted that mere mention of federal statutes which are typically standards on which state law duties are imposed do not necessarily constitute substantial federal questions. ¹²

Defendants additionally argued that by amending their complaint, plaintiffs were clearly trying to manipulate the forum. The court did not find an intent to manipulate, however, because while the amended complaint *did* withdraw its negligence per se claim based in federal law, it still made ample mention of state *and* federal violations. Nevertheless, the court recognized that the amended complaint merely expanded in more detail the state regulations Tonawanda Coke Corp. allegedly violated. Additionally, if a federal issue is the basis of one of many theories supporting a claim, it is not sufficient to substantiate federal jurisdiction. If

Lastly, the court noted that it may remand a case back to state court in the interest of economy, fairness, and convenience.¹⁷ The District Court had already remanded at least fifteen other similar cases to state court on subject-matter jurisdiction grounds and was compelled to remand this case as well.¹⁸

Conclusion

The court granted plaintiffs' motion to remand the case back to state court for lack of subject-matter jurisdiction because there was no substantial question of federal law on the face of plaintiffs' complaint.¹⁹

Steven Fingerhut Albany Law School '13

Endnotes

- 1. 28 U.S.C. § 1441(a).
- 2. 28 U.S.C. § 1331.
- Abbott v. Tonawanda Coke Corp., 11-CV-549S, 2012 WL 42414, 3 (W.D.N.Y. Jan. 9, 2012).
- 4. *Id.* at 4.
- 5. Id. at 3.
- 6. *Id.* at 1.
- 7. Id.
- 8. *Id*
- 9. Id.
- 10. Id. at 3.
- 11. Id. at 4.
- 12. Id.
- 13. *Id.* at 5.
- 14. Id.
- 15. *Id.*
- 16. Id.
- 17. Id. at 6.
- 18. Id.
- 19. Id.

* * *

Alliance to Save the Mattaponi v. U.S. Army Corps of Engineers, CIV.A. 06-01268 HHK, 2011 WL 4037678 (D.D.C. Sept. 13, 2011)

Facts

The Equal Access to Justice Act (EAJA) allows a party prevailing against the United States in a civil suit to recover reasonable attorneys' fees and costs so long as the position of the government is not substantially justified. The party seeking attorneys' fees must be the prevailing party. The position of the government is deemed substantially justified "on the basis of the record (including the record with respect to the action or failure to act by the agency upon which the civil action is based) which is made in the civil action for which fees and other expenses are sought."

The position of the government is substantially justifiable if its action and legal argument had a "'reasonable basis both in law and in fact.'"⁴ This standard requires more than a mere showing that the action was not frivolous but less than a showing that there was a substantial chance of the government prevailing in its litigation.⁵ A party is not entitled to attorneys' fees merely because the government was "found to have acted arbitrarily and capriciously in the underlying action."⁶

Procedural History

In 2009, environmental groups (The Chesapeake Bay Foundation, the Sierra Club and the Plaintiffs Alliance to Save the Mattaponi), along with Carl T. Lone Eagle Custalow, chief of the Mattaponi Tribe, initiated an action against the United States Army Corps of Engineers ("Corps") and the United States Environmental Protection Agency ("EPA") challenging a permit that approved the construction of the King William Reservoir ("Reservoir Project") in Newport News, Virginia. The parties made cross motions for summary judgment in federal district court.⁸ On March 31, 2009 the court found that the Corps acted arbitrarily and capriciously in its issuance of the permit for the Reservoir Project and that the EPA acted arbitrarily and capriciously in not vetoing the permit. ⁹ The plaintiffs' subsequent motion for attorneys' fees was decided by Magistrate Judge Facciola. 10 He ruled that plaintiffs were entitled to fees and costs from the government, but instead of ordering an amount to be paid he directed his decision back to federal district court to determine if it was a proper ruling. 11

Issues

 Whether or not the Corps was substantially justified in its issuance of a permit to construct the Reservoir Project.

- 2. Whether or not EPA was substantially justified in failing to veto the issuance of the Corps' permit for the construction of the Reservoir Project.
- 3. Whether or not EPA's litigation position regarding the court's jurisdiction was substantially justified.

Rationale

The approved permit for the construction of the Reservoir Project necessitated adding dredge and fill material into waters of Newport News, Virginia. Under section 404 of the Clean Water Act, the Corps can issue such a permit only if it has been deemed to have the least effect on the environment after carefully considering other alternatives. Under Facciola appropriately ruled that the Corps failure to study other practicable alternatives was not substantially justified.

Section 404(c) of the Clean Water Act charges EPA with vetoing any permit which will "have an unacceptable adverse effect on [the aquatic environment]." ¹⁵ EPA approved the Corps' permit for the construction of the Reservoir Project without a comment period, claiming notice and comment proceedings would poorly allocate resources and likely not add any new information to the project. ¹⁶ The District Court agreed with Judge Facciola's determination that EPA was not substantially justified in disregarding its statutory obligations. ¹⁷

The federal defendants made several arguments asserting that under the Administrative Procedure Act ("APA"), the court had no jurisdiction to review the EPA's failure to veto the permit.¹⁸ While plaintiffs maintained that EPA was not substantially justified in its numerous jurisdiction-based arguments, defendants asserted that a jurisdiction-based question is important to any case that comes before a federal judge. 19 The District Court disagreed with Judge Facciola's determination that EPA was not substantially justified in its jurisdiction-based argument at the litigation stage.²⁰ While EPA's statutory obligation defeated the APA agency-discretion argument that was raised, it did not lack substantial justification.²¹ The issue here is not which party had the better argument but whether the argument was based in fact and law.²² The Court ruled that while EPA's reasoning was flawed, it was at least substantially justified.²³

Conclusion

The District Court affirmed Magistrate Judge Facciola's ruling that the Corps was not substantially justified in issuing the permit for construction of the Reservoir Project and that EPA was not substantially justified in failing to veto the permit.²⁴ It disagreed with Judge Facciola's determination that EPA's jurisdiction-based argument at the litigation stage lacked substantial justification.²⁵

Steven Fingerhut Albany Law School '13

Endnotes

- Alliance to Save the Mattaponi v. U.S. Army Corps of Engineers, CIV.A. 06-01268 HHK, 2011 WL 4037678, 1 (D.D.C. Sept. 13, 2011).
- 2. 28 U.S.C. § 2412(a)(1).
- 3. 28 U.S.C. § 2412(d)(1)(B).
- 4. Hill v. Gould, 555 F.3d 1003, 1006 (D.C. Cir. 2009).
- 5. Id
- 6. Alliance to Save the Mattaponi, 2011 WL 4037678, at 2.
- 7. Id. at 1.
- 8. Id.
- 9. *Id.*
- 10. Id.
- 11. Id.
- 12. Id. at 2.
- 13. 40 C.F.R. § 230.10(a).
- 14. Alliance to Save the Mattaponi, 2011 WL 4037678, at 3.
- 15. 33 U.S.C. § 1344(c).
- 16. Alliance to Save the Mattaponi, 2011 WL 4037678, at 4.
- 17. Id.
- 18. Id. at 5.
- 19. Id. at 4
- 20. Id. at 5
- 21. Id
- 22. Hill, 555 F.3d at 1007.
- 23. Alliance to Save the Mattaponi, 2011 WL 4037678, at 6.
- 24. Id. at 7.
- 25. Id. at 6.

* * *

Am. Soc'y for the Prevention of Cruelty to Animals, et al. v. Feld Entm't, Inc., 659 F.3d 13 (D.C. Cir. 2011)

Facts

Appellants are the Animal Protection Institute (API) and a former Ringling Brothers barn helper, Tom Rider. The Ringling Brothers perform with endangered Asian elephants owned by appellees Feld Entertainment, Inc.. Rider claims to have witnessed mistreatment of the elephants during his employment from 1997 to 1999, specifically, the practice of using bullhooks and chains on the elephants. Appellants claim that Feld is in violation of § 9 of the Endangered Species Act (ESA), which makes it unlawful to "take" any endangered species in the United States. The plaintiffs allege that the use of bullhooks and chains "harm[s]," "wound[s]," and "harass[es]" the elephants, and therefore constitutes a taking under the Act.

Procedural History

In 2000, the district court dismissed the plaintiffs' complaint that the use of bullhooks and chains violated the ESA, finding that Rider and the other plaintiffs lacked standing.³ In 2003, the appellate court reversed, finding

that Rider could establish injury in fact.⁴ Rider and the ASPCA filed a new complaint against Feld, and included API in a supplemental complaint. After a six-week bench trial, the district court determined that Rider had no standing because he lacked credibility and failed to prove his allegations. Additionally, the district court determined that API had neither informational nor *Havens* standing. As a result, the district court entered judgment for Feld.

Issues

- 1. Whether the district court applied the proper legal standard to determine whether Rider had Article III standing; and
- 2. Whether the district court properly rejected API's two theories of standing, informational and *Havens*?

Rationale

Tom Rider

Rider argued that under *Animal Legal Defense Fund, Inc. v. Glickman,*⁵ his employment at the circus and interaction with the elephants was sufficient to establish a personal attachment to the elephants. Establishing a personal attachment to the elephants "could form the predicate for an aesthetic injury." Rider claimed that the district court required him to prove an "obsession" and not an attachment with the elephants.

The appellate court disagreed. The appellate court reviews the factual findings of the district court for clear error. To determine clear error, the appellate court must find that a "mistake has been committed." The district court reviewed the factual record as a whole, and in light of the inconsistencies in Rider's testimony and his actions after 2000, which included using a bullhook on elephants in Europe, found that Rider "failed to credibly prove an emotional attachment to any particular elephant." The appellate court found no error in the district court's application of the legal standard.

API's Informational Standing

A plaintiff "suffers an 'injury in fact' when the plaintiff fails to obtain information which must be publicly disclosed pursuant to a statute." ¹¹ In this instance, the API argued that §10(c) of the ESA gives it informational standing to bring a suit. ¹² Section 10(c) requires information provided in the permit application to be made available to the public. ¹³ However, the court pointed out that API brought its claims against Feld under § 9 of the ESA, which did not give API a right to any information. Section 9 is the prohibition of a "taking," whereas § 10 is merely "secondary to this prohibition." ¹⁴

The court distinguished the ESA from the statutes involved in $FEC\ v.\ Atkins^{15}$ and $Judicial\ Watch,\ Inc.\ v.\ U.S.\ Department\ o\ Commerce,^{16}$ two cases in which information-

al standing was extended to the plaintiffs. In Atkins, the Supreme Court held that the plaintiffs were unable to obtain information that the Federal Election Campaign Act (FECA) requires be made public.¹⁷ The purpose of FECA is to "remedy any actual or perceived corruption of the political process" through its disclosure requirements. 18 Similarly, in *Judicial Watch*, the plaintiffs alleged that the Department of Commerce violated the disclosure requirements of the Federal Advisory Committee Act, the purpose of which is to "ensure...that Congress and the public remain apprised of [advisory committees'] existence, activities, and cost." ¹⁹ In contrast, the primary purpose of the ESA is not disclosure, but the conservation of endangered and threatened species.²⁰ Therefore, the court found that the statute did not give API informational standing to bring this claim.

API's Havens standing

If an organization can demonstrate that the defendant's actions cause a "concrete and demonstrable injury to the organization's activities" then it may assert standing. This requires more than just a "mere interest in a problem. API claimed that the use of bullhooks and chains created a public impression that such practices are permissible, and that the organization must counteract this impression with advocacy and education. Feld argued that injury to advocacy is insufficient to establish injury-in-fact. However, the court did not resolve this issue because API's "claim to Havens standing falters on causation grounds."

API had the burden of proving that "Feld's use of bullhooks and chains fosters a public impression that these practices are harmless"; however, the only evidence in support of this claim came from Rider's testimony which "suggest that the public may in fact have little awareness of these two techniques." ²⁶ This evidence did not sufficiently demonstrate a causal link between Feld's treatment of elephants and the public's impression of the use of bullhooks and chains. Therefore, API did not carry its burden of proving the causation element necessary to establish standing. ²⁷

Conclusion

The Appellate Court affirmed the district court's ruling that the appellants lacked Article III standing to bring their claim.

Rachel Berardinelli St. John's University School of Law '12

Endnotes

- 1. 16 U.S.C. § 1533(a)(1)(B).
- 2. 16 U.S.C. § 1532(19).
- Performing Animal Welfare Soc'y v. Ringling Bros. & Barnum & Bailey Circus, No. 00-cv-01641, 2001 U.S. Dist. LEXIS 12203 (D.D.C. June 29, 2001).

- Am. Soc'y for Prevention of Cruelty to Animals v. Ringling Bros. & Barnum & Bailey Circus, 317 F.3d 334, 354 U.S. App. D.C. 432 (D.C. Cir. 2003).
- 5. 154 F.3d 426, 332 U.S. App. D.C. 104 (D.C. Cir. 1998) (en banc).
- 6. Am. Soc'y for Prevention of Cruelty to Animals, et al. v. Feld Entertainment, Inc., 659 F.3d 13, 21 (D.C. Cir. 2011).
- 7. Id. (quoting ASPCA, 317 F.3d at 337).
- Id. (quoting United States v. U.S. Gypsum Co., 333 U.S. 364, 395, 68 S. Ct. 525, 92 L. Ed. 746 (1948).
- 9. Id
- 10. Id.
- 11. *Id.* at 22 (quoting *FEC v. Atkins*, 524 U.S. 11, 21, 118 S. Ct. 1777, 141 L. Ed. 2d 10 (1998)).
- 12. 16 U.S.C. § 1539(c).
- 13. Id. ("The Secretary shall publish notice in the Federal Register of each application for an exemption or permit which is made under this section... Information received by the Secretary as a part of any application shall be available to the public as a matter of public record at every stage of the proceeding.").
- 14. Feld, 659 F.3d at 24.
- 15. FEC v. Atkins, 524 U.S. 11 (1998).
- Judicial Watch, Inc. v. U.S. Department o Commerce, 583 F.3d 871 (D.C. Cir. 2009).
- 17. Atkins, 524 U.S. at 21.
- 18. Feld, 659 F.3d at 24 (quoting Atkins, 524 U.S. at 14).
- Feld, 659 F.3d at 24 (quoting Public Citizen v. U.S. Dep't of Justice, 491 U.S. 440, 446 (1989)).
- 20. Feld, 659 F.3d at 24 (citing 16 U.S.C. § 1531(b).
- Feld, 659 F.3d at 25 (quoting Havens Realty Corp. v. Coleman, 455 U.S. 363, 379 (1982)).
- 22. Id. (quoting Sierra Club v. Morton, 405 U.S. 727, 739 (1972)).
- 23. Id. at 26.
- 24. Id.
- 25. Id. at 27.
- 26. Id. at 27, 28.
- 27. Id. at 27.

* * *

Association for a Better Long Island, Inc. v. New York State Department of Environmental Conservation, 935 N.Y.S.2d 488 (Sup. Ct., Albany Co. 2011)

Plaintiffs included an economic development association; a land-owning limited liability company and its managing partner; the Town of Riverhead; and the Town's community development agency.¹ The plaintiffs challenged amendments made by the New York State Department of Environmental Conservation (DEC) to regulations regarding the incidental taking of endangered or threatened species.²

In 2010, the DEC adopted amendments to its rules on endangered or threatened species, creating a new permitting process for land use changes which could have potential negative impacts on endangered or threatened species.³ Such land use impacts are called an "incidental

taking" of the species and, under the new rules, DEC will not issue a permit for an incidental taking unless the applicant can ensure mitigation measures will be taken to protect the impacted species and will result in a "net conservation benefit" to the species overall.⁴

Plaintiffs claim that the DEC had failed to obtain the approval of the State Environmental Board before passing the new rules; that the DEC had failed to hold a public hearing on the amendments; that the adoption of the changes exceeded the scope of DEC's authority; that DEC's passage of the rules was done in violation of the State Administrative Procedures Act (SAPA) and the State Environmental Quality Review Act (SEQRA); that the DEC's new rules improperly delegated a governmental function—in this case the regulation of threatened and endangered species—to individual property owners; and that the new rules violate plaintiffs' substantive due process rights.⁵

DEC countered with a motion to dismiss the petitions on the basis of standing and ripeness, arguing that plaintiffs had not yet suffered any actual, concrete, justiciable injury because they had not applied for an incidental takings permit or requested a determination from the DEC as to whether a permit would be required for any proposed activity.⁶ Further, DEC argued that, depending on the outcome of either a permit application or a request for determination, it was possible no regulation of any of the plaintiffs would be necessary.⁷ Even if regulation was necessary, it was purely speculative without a specific instance on which to base a complaint.⁸ For those reasons, DEC argued plaintiffs' claim was unripe and premature.⁹

The New York State Supreme Court, Albany County, sided with the DEC in holding that the issues were not ripe. ¹⁰ Only three of the claimants were landowners and none had current plans to engage in any activity which would have triggered the DEC regulations. ¹¹ While the Town of Riverton had plans to subdivide and develop property at some point in the future, the town had not yet identified what type of land use was planned, making it impossible to determine whether a DEC incidental taking permit would be required. ¹² The court felt that the fact that the Town may someday need to obtain such a permit for a future project was insufficient to constitute an actual, concrete injury. ¹³ Thus, the issues presented in the plaintiffs' claim were adjudged unripe and nonjusticiable. ¹⁴

The issue of standing was also decided in DEC's favor. Three of the plaintiffs claimed to own property which might trigger the DEC rules because of nearby populations of tiger salamanders and short-eared owls. 15 However, none of the landowners had actually applied for or been denied a permit under the new rules. 16 The court pointed out that the DEC rules, unlike a zoning change which effects an immediate and tangible change to land use of a specific parcel or area, are statewide rules general in their application, meaning that any landowner anywhere in the state who happens to have land located near

threatened or endangered species would be subject to the same rules.¹⁷ Thus, the individual plaintiffs could not demonstrate they had suffered any concrete, palpable injury different from that of the general public.¹⁸ The court held that none of the individual petitioners had standing to bring a claim.

Nor did the Association for a Better Long Island fare any better in the standing analysis. The court ruled that the Association failed to meet the three-part test for associational standing laid out in *Society of Plastics Indus. Inc. v. County of Suffolk*, 77 N.Y.2d 761, 775 (1991). ¹⁹ Neither the Association nor any of its members had successfully proven any concrete, specific injury, suffering the same standing problems as the other individual petitioners in this case; therefore, the Association did not have standing to sue either. ²⁰

Plaintiffs tried to make a final claim under the State Finance Law § 123 (b) as citizen taxpayers, but the court dismissed this claim as well. ²¹ The court held that a citizen taxpayer claim must have a sufficient nexus to fiscal activities of the state and that petitioners' claim was clearly to challenge the DEC's authority to adopt the regulations, not the loosely connected state financial outcomes of the permitting program. ²²

Accordingly, the Supreme Court, Albany County, dismissed the complaint.

Laura Bomyea Albany Law School '13

Endnotes

- Association for a Better Long Island, Inc. v. New York State Department of Environmental Conservation, 935 N.Y.S.2d 488, 492 (Sup. Ct., Albany Co. 2011).
- 2. Id.
- 3. *Id.* at 491. DEC's regulations are codified at 6 N.Y.C.R.R. Part 182.
- 4. Association for a Better Long Island, 935 N.Y.S.2d at 491–92.
- 5. Id. at 492.
- 6. Id. at 493.
- 7. Id.
- 8. Id.
- 9. *Id.*
- 10. Id. at 495.
- 11. *Id.*
- 12. Id.
- 13. *Id.*
- 44 71
- 14. *Id.*
- 15. Id. at 496.
- 16. Id.
- 17. *Id.*
- 18. Id.
- 19. *Id.*
- 20. Id.
- 21. Id. at 497.

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Center for Biological Diversity, et al. v. Salazar, et al., No. CV10-2130-PHX-DGC, 2012 WL 78943, (D. Ariz. Jan. 11, 2012)

Facts

The bald eagle was listed as a threatened species under the Endangered Species Act (ESA) until the Fish and Wildlife Service (FWS) removed it from the list in 2007. In 2004, while the FWS was considering removing the bald eagle from the threatened species list, Plaintiff Center for Biological Diversity (the "Center") filed a petition asking that FWS list desert eagles separately as a distinct population segment (DPS). FWS denied the Center's petition, and the Center filed suit.²

The judge in that case ruled that FWS's denial of the Center's petition was arbitrary and capricious, and therefore set aside the denial. The judge ordered FWS to conduct a 12-month status review, and enjoined the application of FWS's delisting rule to the desert eagle population until FWS made a DPS determination.³ The 12-month status review found that "the desert eagle was 'discrete' but not 'significant' to the species as a whole and therefore not entitled to DPS treatment." The judge in that case lifted the injunction, and FWS issued a rule removing the bald eagle from the threatened species list effective September 30, 2010.⁵

Procedural History

The Center and Maricopa Audubon Society filed this action alleging that the FWS's 12-month finding was arbitrary and capricious. The plaintiffs asked the court to remand the 12-month finding and sought an injunction to keep FWS from removing the desert eagle from the threatened species list FWS's finding is revised on remand. The court granted plaintiffs' summary judgment motion, ruling that the FWS' finding was "procedurally flawed." The court remanded the 12-month finding and ordered FWS to complete a new 12-month status review by April 20, 2012. The court asked the parties to brief the propriety of injunctive relief pending the new 12-month finding on remand.

Issues

Whether an injunction preventing the FWS from removing the desert eagle from ESA is necessary to prevent the desert eagle from a likely threat of irreparable harm?

Rationale

A plaintiff seeking an injunction must demonstrate four factors: "(1) that it has suffered an irreparable injury; (2) that remedies available at law... are inadequate to

compensate for that injury; (3) that, considering the balance of hardships between the plaintiff and defendant, a remedy in equity is warranted; and (4) that the public interest would not be disserved by a permanent injunction." To obtain an injunction, plaintiffs must show the likelihood of irreparable harm, and not the mere possibility of harm.

Plaintiffs requested an injunction that would last either until the desert eagle is actually listed or until the litigation is resolved by an agreement of the parties. ¹⁰ The court declined to consider an injunction beyond the April 20, 2012 deadline for FWS to complete a new 12-month finding regarding the desert eagle's DPS status. It reasoned that a more extensive injunction would do more than return the desert eagle to the status quo that would have existed if the FWS had lawfully conducted its first 12-month status review, and would exceed the scope of the litigation. ¹¹

The plaintiffs argued that a proposed housing development in Chino Valley and plans for new developments in Prescott Valley would both lead to increased pumping from the Big Chino aquifer and contribute to the dewatering of desert eagle nesting areas without the consultations required under § 7 of the ESA.¹² It was unclear to the court whether the land swaps necessary for these projects had already occurred or whether they would be completed before the end of the remand period. 13 The evidence suggested that even if the development projects went forward, there would be "significant hurdles" associated with future pumping of the Big Chino aquifer. 14 FWS estimated that the process would take several years and any potential harm from pumping of the aquifer would be unlikely to occur before the end of the remand period.¹⁵ Given the speculative nature of the evidence, the court found that plaintiffs did not meet their burden of showing a likelihood of irreparable harm during the remand period. 16

The court next rejected the plaintiffs' argument that federal funding to the state of New Mexico for water projects could be used to divert water from the Gila River system, which might impact three desert eagle nesting areas. ¹⁷ The court noted that the details of the New Mexico water project were still being developed, and that New Mexico still has until 2014 to choose whether to use the federal funding. Without more information, the court could not conclude that harm to the desert eagle was "reasonably certain" to occur without an injunction in this case. ¹⁸

The Arizona Bald Eagle Nestwatch program was not likely to face budget shortages if the desert eagle was delisted, according to the court. It noted that funding for the program had already been committed through 2012. ¹⁹

The court also rejected plaintiffs' arguments that federal actions regarding livestock grazing in the Lower Verde River, recreational activities and proposed facility developments along major rivers and lakes, and the federal management of aquifers, could all have a negative effect on the desert eagle population.²⁰ The court found that plaintiffs did not point to any specific impending government action in any of these contexts that would likely impact the desert eagle population before the end of the remand period.²¹

The court next addressed the plaintiffs' concern that the U.S. Forest Service was in the process of revising its Land and Resources Management Plans (LRMPs), and that the process would go forward without § 7 consultation absent an injunction. The court found that plaintiffs did not point to any specific plans that would pose a likely threat of irreparable harm to the desert eagle if made without § 7 consultations during the remand period.²² It similarly determined that plaintiffs did not demonstrate that the recreation and grazing allowed in national forests under the current LRMPs were reasonably likely to result in the "take" of eagles in the Sonoran Desert area and the Tonto National Forest before April 20, 2012.²³

The court next rejected Plaintiff-Intervenor San Carlos Apache Tribe's argument that without ESA protections, wind energy projects would pose a serious threat to desert eagles. ²⁴ The court noted that San Carlos did not identify any particular wind project that was within the habitat of the desert eagle or that was likely to be developed there. ²⁵

Finally, the court rejected plaintiffs' request that the court vacate the finding in the 2007 delisting rule as beyond the scope of the litigation. The court noted that it had already made rulings that prevented FWS from relying on the 2007 delisting rule in its findings on remand.²⁶

Conclusion

While the plaintiffs pointed to a number of possible harms, the court found that the plaintiffs failed to show that the desert eagle was likely to suffer irreparable harm without ESA protections during the remand period. Therefore, the court denied the plaintiffs' request for an injunction.

Lisa Fresolone St. John's University School of Law '14

Endnotes

- Ctr. for Biological Diversity v. Salazar, No. CV10-2130-PHX-DGC, 2012 WL 78943, (D. Ariz. Jan. 11, 2012).
- Id. (citing Ctr. for Biological Diversity v. Kempthorne, No. CV 07– 0038-PHX-MHM, 2008 WL 659822 (D.Ariz. March 6, 2008)).
- 3. Id
- 4. Ctr. For Biological Diversity, 2012 WL 78943 at *1.
- 5. Id
- 6. Id. at *2.
- 7. Id
- 8. Id. (quoting eBay Inc. v. MercExchange, L.L.C., 547 U.S. 388 (2006)).

- Id. at *3 (citing Winter v. Natural Resources Defense Council, Inc., 555 U.S. 7, 24 (2008)).
- 10. Id. at *2.
- 11. Id.at *3.
- 12. Id. at 4.
- 13. Id.
- 14. Id.
- 15. *Id.* at 5.
- 16. Id.
- 17. Id.
- 18. Id.
- 19. Id. at 6.
- 20. Id. at 6-7.
- 21. Id.
- 22. Id. at 7.
- 23. Id.
- 24. Id. at 8.
- 25. Id.
- 26. Id

Cooperstown Holstein Corp. v. Town of Middlefield, 2012 WL 1068841 (Sup. Ct., Otsego Co. 2011)

Facts

Plaintiffs, landowners within in the town that have entered into natural gas leases with energy companies, claim New York Environmental Conservation Law § 23-0303(2) expressly and implicitly preempts the Town of Middlefield Zoning Law banning gas, oil, or solution drilling or mining within the township. 1 The newly enacted Zoning Law effectively banned all oil and gas drilling within the township.² Article V Subsection A of the Zoning Law entitled "Prohibited Uses" specifically states "[h]eavy industry and all oil, gas, or solution mining and drilling are prohibited uses...."3 In defining heavy industry, the Town of Middlefield recognized "the potential for large-scale environmental pollution when equipment malfunction or human error occurs." 4 The New York ECL § 23-0303(2) supersession clause enacted with the statute in 1981 reads:

> The provisions of this article shall supersede all local laws or ordinances relating to the regulation of the oil, gas, and solution mining industries; but shall not supersede local government jurisdiction over local roads or the rights of local government under the real property law.⁵

Procedural History

The Supreme Court of Otsego County denied the Plaintiffs' motion for summary judgment to declare the

Defendant's Zoning Law as void being preempted by New York State ECL § 23-0303(2).6

Issue

Whether the enacted town zoning law is preempted by New York ECL § 23-0303(2)?

Rationale

The Supreme Court for Otsego County denied plaintiffs' petition for summary judgment requesting the court declare the Town of Middlefield's law void as being preempted by ECL § 23-0303.7 After review of the legislative history of ECL §23-0303(2), the court did not conclude that the intent of the Legislature was to abrogate the constitutional and statutory authority of municipalities to legislate for its own affective land use.8 The only intent of the Legislature was to supersede local laws relating to the regulation of drilling industries.9

The court then looked at past precedent to support its findings. 10 It examined the Court of Appeals opinion Frew Run Gravel Prod. v. Town of Carroll, 11 which held the supersession clauses of the Mining Land Reclamation Law and ECL § 23-2703(2) only preempted local government regulations pertaining to the methods of mining, not the regulation of land use. 12 The court also looked at Gernatt Asphalt Prod. v. Town of Sardinia, 13 in which the Court of Appeals expanded on the differences between the methodology of mining and local land use regulations, upholding the ruling in Frew Run Gravel that the State law did not preempt local zoning ordinances.¹⁴ In a footnote, the court stated Gernatt Asphalt "stands for the proposition that a municipality may ban a particular activity, such as mining, in the furtherance of its land use authority."15 The court analogized the issues in Frew Run Gravel and Gernatt Asphalt to the defendant's Zoning Law to find there was no conflict between the local and state laws. 16

The court completed its analysis by examining the supersession provisions in Oil, Gas, and Solution Mining Law. ¹⁷ It found the supersession clause preempts local regulations methods of drilling "solely and exclusively" but does not preempt the local government land use control. ¹⁸

Conclusion

The Supreme Court held that ECL § 23-0303(2) does not preempt a local municipality from enacting land use regulations within its geographical jurisdiction. ¹⁹ The court found the State's interest was in regulating "the manner and method" of the industry and local laws controlling land use do not conflict and may be easily harmonized. ²⁰

Mark Houston Albany Law School '14

Endnotes

- Cooperstown Holstein Corp. v. Town of Middlefield, 2012 WL 1068841, *1 (Sup. Ct., Otsego Co. 2012).
- 2. Id at *2.
- 3. Id. at *1.
- 4. Id. at *1.
- 5. Id.
- 6. Id at *9.
- 7. Id
- 8. Id at *8.
- 9. Id *8.
- 10. Id at *8-9.
- 11. 71 N.Y.2d 126 (1987).
- 12. Cooperstown Holstein Corp, 2012 WL 1068841 at 9.
- 13. 87 N.Y.2d 668, 681-682 (1996).
- 14. Id at 9.
- 15. Id.
- 16. Id.
- 17. Id.
- 18. Id at *8.
- 19. Id.
- 20. Id.

Entergy Nuclear Vermont Yankee, LLC v. Shumlin, 2012 WL 162400 (Jan. 19, 2012)

Facts

Vermont Yankee is a boiling water reactor, which produces one-third of the electricity consumed by Vermont, and also sells electricity to out-of-state utilities. ¹ Its current license was to expire as of March 21, 2012.²

In 1999, Vermont Yankee Nuclear Power Corporation decided to sell Vermont Yankee to Entergy and the transaction was approved by the Public Service Board in 2002.³ The sale only authorized operation until March 21, 2012 and continued operation would only be allowed if an application for renewal was submitted and granted.⁴ The sale was also conditioned on that the Public Service Board had jurisdiction under current law to grant or deny approval of Vermont Yankee beyond March 21, 2012 and that the parties waived any claims under federal law preempting the jurisdiction the Board to take the actions and impose the conditions of the agreement to allow continued operation of Vermont Yankee.⁵

In 2003, Vermont Yankee increased its power output through a twenty percent power uprate. The uprate would exhaust Vermont Yankee's spent fuel storage space eighteen months earlier than expected. Vermont law "prohibited construction or establishment of a spent nuclear fuel facility unless the General Assembly, through either bill or joint resolution, first found that it promoted 'the general good of the state' and approved a petition,"

but there was an exemption which stated the law "'did not apply to any temporary storage by Vermont Yankee Nuclear Power Corporation' of spent fuel." As a result, Entergy began preparing to petition the Board to approve construction of a dry cask spent fuel storage system. The concrete dry cask storage system and pad that Entergy expected to construct had been previously reviewed and approved by the Nuclear Regulatory Commission ("NRC") and did not require any further permitting by the NRC, but Vermont's Attorney General decided that Entergy did not fall under the state exemption because the exemption was owner-specific, not site-specific. As a result, Entergy proceeded to lobby for a new exemption.

The Vermont General Assembly then enacted Act 74, which included Section 6522.¹² This section prohibited the "'commencement of construction or establishment of any new storage facility for spent nuclear fuel before receiving a certificate for the public good' from the Board." ¹³ The section further stated that "'[s]torage of spent fuel derived from the operation of Vermont Yankee after March 21, 2012 shall require the approval of the general assembly." As a result, Entergy filed a petition for dry fuel storage construction, which was approved by the Board on the basis that Entergy had shown that the facility would not cause harm to the natural environment, could be constructed without increased safety risk, and without affecting the reliability of Vermont Yankee. 15 The Board also imposed additional conditions requiring financial assurances to ensure spent fuel could be managed through decommissioning; an assurance Entergy would restore the site to greenfield condition; and submission of a study reviewing the stability of adjacent banks; the Board limited the total fuel that could be stored to the amount derived from operation through 2012.¹⁶

Entergy then filed a federal license renewal with NRC and as a result the Vermont General Assembly enacted Act 160, which "requires approval by the General Assembly before the Board may issue a certificate of public good permitting continued operation." The General Assembly also enacted Act 189, which provided "for a thorough, independent, and public assessment of the reliability of the systems, structures, and components of the Entergy Nuclear Vermont Yankee facility" and it was "the intent of the general assembly to determine...the reliability issues associated with operating [Vermont Yankee]...after its scheduled closure in 2012." ¹⁸

In 2011, NRC issued a renewed license for Vermont Yankee, which extended its operation to March 21, 2032. ¹⁹ The license certified that the continued operation could be conducted without endangering the public health or safety. ²⁰ The General Assembly, on the other hand, could not come to an agreement to approve continued operation of Vermont Yankee. ²¹ As a result, Entergy, the owner of Vermont Yankee, filed suit and brought three counts against Vermont's governor, attorney general, and members of the Vermont Public Service Board. ²² The first

count sought a permanent injunction and declaration that three Vermont statutes governing Vermont Yankee were preempted by the Atomic Energy Act ("AEA").²³ The second count sought an injunction and declaration that the Federal Power Act preempts Vermont officials from conditioning Vermont Yankee's continued operation on the existence of a below-market power purchase agreement.²⁴ The third count sought a permanent injunction and declaration that Vermont may not require continued operation of Vermont Yankee conditioned on the existence of a below-market purchase agreement with Vermont retail electric utilities because it violated the Commerce Clause.²⁵

Issues

- 1. Whether the basis for the enactment of the Vermont statutes were safety concerns as to the long-term operation of Vermont Yankee?
- 2. Whether the Federal Power Act preempts the state of Vermont and its officials from requiring Vermont Yankee to enter into power purchase agreements with Vermont retail utilities at belowmarket prices as a condition to continued operation?
- 3. Whether conditioning approval for continued operation on the existence of a power purchase agreement at below-market rates violates the Commerce Clause?

Rationale

The court stated that case law has identified three circumstances in which state law may be preempted by federal law: 1) A federal statute explicitly states the extent to which the statute preempts state law or regulates a field; 2) in the absence of statutory language, state law may be preempted if it regulates conduct that Congress intended the federal government to regulate exclusively because either Congress left no room for the states to supplement the federal regulatory scheme or the federal interest is entrenched in the jurisdiction that it will be assumed to preclude the enforcement of state law on the issue; 3) state law may be preempted if it conflicts with federal law.²⁶

Under count I, the court looked to precedent case law for guidance in *Pacific Gas & Electric Co. v. State Energy Resource Conservation & Development Commission.*²⁷ In the case, the Supreme Court defined the federal government's field of regulation under the AEA as regulation of the radiological safety aspects during construction and operation because "the federal government has occupied the entire field of nuclear safety concerns." The states, on the other hand, have the authority to regulate electrical utilities for determining questions of demand, reliability, and other economic concerns.²⁹

Under Act 160, the General Assembly has an unreviewable power to allow Vermont Yankee's current certifi-

cate of public good to lapse, even if it does so for federally preempted reasons, because the Act requires affirmative approval by the General Assembly to continue operation.³⁰ Section 254 of Act 160 authorizes the Public Service Board to render studies to support the general assembly's finding.³¹ These studies were to "provide analysis of long-term environmental, economic, and public health issues."32 The court turned to the legislative history to determine the purpose of Act 160 due to evidence that the statute was motivated by radiological safety concerns within its provisions. 33 The numerous legislators' comments and recordings referencing safety concerns incorporated into the legislative history proved that radiological safety of Vermont Yankee was the primary purpose for enacting Act 160.34 Therefore, the court held that Act 160 was preempted by the AEA.35

Section 6522 of Act 74 required Vermont Yankee to get approval from the General Assembly in order store any spent nuclear fuel from operation after March 12, 2012.³⁶ Like Act 160, absent an affirmative approval, the provision gave an unreviewable authority to the General Assembly to fail to act, which led the court to inquire whether the provision was enacted with a preempted purpose.³⁷ The court found that section 6522 was grounded in the legislature's concerns for radiological safety based on numerous comments and questions posed in the legislative history referencing safety.³⁸ Therefore section 6522 of Act 74 was preempted by the AEA as well.³⁹

Act 189 required a study focused on safety-related systems regulated by the NRC and required Vermont Yankee to address the study's recommendations. ⁴⁰ While Act 189 has multiple references to establishing a purpose in safety, the assessment teams conducting the study have already completed their work and the Public Service Board cannot consider the study in its decision required by Act 160 due to Act 160 deemed preempted. ⁴¹ The court held that Act 189 was no longer in effect and the challenge to Act 189 was moot. ⁴²

Under count II, the court cited the Federal Power Act ("FPA"), "[s]tates may not regulate in areas where FERC has properly exercised its jurisdiction to determine just and reasonable wholesale rates or to insure that agreements affecting wholesale rates are reasonable."⁴³

Vermont Yankee's market-based tariff filed with FERC states that it may sell electric energy at rates, terms, and conditions established by an agreement with the purchaser. At Case law makes clear that FERC has exclusive jurisdiction to review rates and agreements to ensure they are just and reasonable. The Where FERC has mandated certain allocations, the FPA's preemptive reach prohibits state action trapping costs with the producer. If Vermont Yankee was coerced into agreeing to a below-market contract, the terms and conditions of the contract could be reviewed by FERC to determine if the agreement was just and reasonable. The court held that it was not clear what preemptive effect the FPA has to prevent Ver-

mont officials from conditioning continued operation on such an agreement, given the fact there is no agreement subject to review.⁴⁸ Therefore the court declined "to issue a declaratory judgment that Vermont's regulatory scheme is preempted by the [FPA]."⁴⁹

Under count III, the Court found evidence of intent to require Vermont Yankee to agree to below market power purchasing agreements to benefit Vermont utilities in order to continue operation. A requirement that a power purchase agreement exist before the legislature can approve continued operation would likely cause the prices in the agreement to be significantly lower due to the contingency of continued operation.

Based on the legislative history of Act 160 and Act 74 "there is evidence Vermont Yankee would be required to sell a portion of its output generation to Vermont utilities at below-market rates, rates that would not otherwise be available to the utilities if they were negotiating on the same footing as customers in other states." ⁵² Case law has made clear that a state requiring a power plant to provide its residents a benefit not available to consumers in other states violates the Commerce Clause. ⁵³

The Court held that Vermont officials were prohibited from conditioning continued operation on Vermont Yankee entering into a blow market power purchase agreement with Vermont utilities because Vermont Yankee would be irreparably harmed if it was denied continued operation and conditioning continued operation on the existence of a below market power purchase agreement violates the Commerce Clause.⁵⁴

Conclusion

The court found the purposes of enacting Act 160 and section 6522 of Act 74 were rooted in safety concerns and therefore preempted by the AEA, but the court found the challenge to Act 189 was moot.⁵⁵ Although the court could not determine if the FPA preempted the requirement of a below-market power purchase agreement as a condition to continued operation due to the lack of an agreement to review, it did find conditioning approval for continued operation on the existence of a below-market power purchasing agreement violates the Commerce Clause because it provides Vermont residents an economic benefit that out-of-state consumers would not have.⁵⁶

Mark Wagner Albany Law School '13

Endnotes

- Entergy Nuclear Vermont Yankee, LLC v. Shumlin, No. 1:11-cv-99 (jgm), 2012 WL 162400 *2 (Jan. 19, 2012).
- 2. Id.
- 3. Id. at *2, *4.
- 4. *Id.* at *3.
- 5. Id.

- 6. *Id.* at *5
- 7. Id.
- 8. Id.
- 9. Id.
- 10. Id.
- 11. Id.
- 12. Id. at *9.
- 13. Id.
- 14. Id. at *10
- 15. *Id.* at *11.
- 16. *Id.* at *12.
- 17. Id. at *13, *19.
- 18. Id. at *24.
- 19. Id. at *29.
- 20. Id
- 21. Id. at *28.
- 22. Id. at *1, *29.
- 23. Id. at *1.
- 24. Id.
- 25. Id.
- 26. Id. at *29.
- 27. 461 U.S. 190 (1983).
- Vermont Yankee, 2012 WL 162400, at *33 (citing Pacific Gas, 461 U.S. at 205, 212).
- 29. Id. at *33, (citing Pacific Gas, 461 U.S. at 205).
- 30. Id.at *38.
- 31. Id.at *39
- 32. Id.
- 33. Id.
- 34. *Id.* at *40
- 35. Id. at *42.
- 36. Id.
- 37. Id.
- 38. Id.
- 39. Id. at *43.
- 40. Id.
- 41. *Id.*
- 42. Id.
- 43. Id. at *44.
- 44. Id.
- 45. Id.
- 46. *Id.*at *45.
- 47. Id.
- 48. *Id.*
- 49. Id.
- 50. *Id.* at *47.
- 51. *Id.*
- 52. Id. at *49.
- 53. Id.
- 54. Id.
- 55. Id. at *43-44.
- 56. Id. at *47, *49.

* * *

Gracie Point Cmty. Council v. New York State Dept. of Envtl. Conservation, 936 N.Y.S.2d 342 (3d Dep't 2011)

Facts

In 2004, the New York City Department of Sanitation (DSNY) proposed a new solid waste management plan (SWMP) to go into effect for the next 20 years. The plan was to rely on trains and barges, in order to reduce the trucking of waste from Manhattan to the outer boroughs. This plan reflected concerns about the health and environmental impacts on communities in the outer boroughs where transfer stations were located. One of the four barges was to be located at an inactive transfer site in the Gracie Point neighborhood, along the East River waterfront.

Procedural History

In 2004, DSNY and the Department of Environmental Conservation (DEC) reviewed the SWMP under the State Environmental Quality Review Act, the City Environmental Quality Review Act and issued a final environmental impact statement (FEIS) for the SWMP.⁵ Proceedings and actions commenced by local residents and community groups challenging the siting of the Gracie Point transfer station were dismissed by the First Department.⁶

DSNY submitted applications to DEC for permits for construction and operation of the Gracie Point transfer station, which the DEC subsequently issued.⁷ The grant of the requested permits was referred to DEC's Office of Hearings and Mediation Services and then assigned to an Administrative Law Judge (ALJ).⁸ Petitioners' and respondents' petition for full party status was granted by the ALJ, which found a substantive and significant issue was raised as to whether the Gracie Point transfer station complied with the operational noise requirement in 6 NYCRR 360-1.14 (p).⁹ The ALJ also determined that none of the other issues raised by petitioners warranted an adjudicative hearing or amendment of the draft permit.¹⁰ The ALJ's ruling was affirmed by the Assistant Commissioner of the DEC.¹¹

Following the affirmation of the ALJ's decision, petitioners commenced proceedings pursuant to CPLR article 78 in Supreme Court, Albany County and New York County. The proceedings were later consolidated and then dismissed. The petitioners appealed. 14

Issue

Whether the DEC properly issued the permits requested by DSNY for the Gracie Point transfer station and whether DEC properly concluded that petitioners failed

to raise an issue for adjudication regarding a claimed zoning violation and diesel emission impacts? 15

Reasoning

In support of their claim that the DEC had not properly issued the permits, petitioners argued that DEC had violated its statutory duty to make a decision based on whether the facility would harm public health, safety, and welfare. 16 The court agreed with DEC that its duty had been satisfied through the use of the regulations promulgated by DEC to determine whether to grant the permits.¹⁷ Petitioners also argued that the permits were issued prematurely, because DSNY had not established how the waste would be removed once at the transfer station. 18 However, the court found that DEC had taken appropriate steps to address this concern, such as requiring DSNY to provide a final transfer, transport and disposal plan prior to the opening of the transfer cite, as a condition of the permit. 19 Furthermore, the court found that DEC had not failed to show the proposed facility was "reasonable and necessary (6 NYCRR 608.8 [a]; 661.9[b][1] [iii]) when it did not consider an alternate site.²⁰

In regards to the zoning violation, the court agreed with the First Department's prior holding that whether the transfer station met zoning noise restrictions was immaterial because the current noise levels were already in excess of the restrictions. ²¹ Likewise, petitioner's argument regarding the diesel emission impacts of DSNY-owned trucks was not entitled to adjudication by DEC. ²² Petitioners had not shown that DEC had the authority to regulate private mobile emission sources. ²³ Moreover, the permit DEC provided to DSNY was designed to minimize air pollution impacts. ²⁴

Conclusion

The Appellate Division found that DEC had properly issued permits to DSNY for the Gracie Point transfer station. ²⁵ Furthermore, the petitioners' claims of zoning violations and diesel emission impacts had not warranted adjudication by the DEC. ²⁶

Kevin Cassidy Albany Law School '13

Endnotes

- Gracie Point Cmty. Council v. New York State Dept. of Envtl. Conservation, 936 N.Y.S.2d 342, 344 (3d Dep't 2011).
- 2. Id.
- 3. Id.
- 4. Id.
- 5. Id. at 345.
- 6. Id.
- 7. *Id.*
- 8. Id. at 346.
- 9. Id.

- 10. Id.
- 11. Id.
- 12. Id.
- 13. Id.
- 14. *Id.* at 346-47.
- 15. Id. at 348.
- 16. Id. at 346.
- 17. Id. at 346-47.
- 18. Id. at 347.
- 19. Id. at 348.
- 20. Id.
- 21. Id.
- 22. Id.
- 23. Id.
- 24. Id.
- 25. Id. at 347-48.
- 26. Id. at 348.

Huntington and Kildare, Inc. v. Grannis, 89 A.D.3d 1195, 932 N.Y.S.2d 558 (3d Dep't, Nov. 3, 2011).

Facts

The petitioner, Metz Family Enterprises, is the successor in interest of fellow petitioner Huntington and Kildare, Inc.¹ Both petitioners were a party to this action based upon current and former ownership interests in the subject parcel of property, which was contaminated by a leaking underground gas tank owned by Stewart's Ice Cream Company.²

Procedural History

The Department of Environmental Conservation (hereinafter DEC) commenced an administrative enforcement action against petitioners concerning the discharge of, and failure to contain, petroleum on the site.³ Petitioners sought to introduce Stewart's into the matter as a party, but were denied.⁴ The administrative law judge found petitioners guilty of the offenses charged, imposing upon each a civil penalty in the amount of \$15,000.⁵ Petitioners commenced this action, challenging the administrative determination.⁶

Issue

Can liability be avoided based upon lack of ownership of the source of the contamination?

Rationale

Petitioners claimed they could not be held liable for the discharge, and the failure to contain, as they were not in control of the source of the contamination because they did not own the underground petroleum storage tanks.⁷

The court explained that this rationale was misplaced. In contamination cases such as this, liability is predicated upon control over the property. Under the applicable Navigation Law, this standard is one of strict liability; that liability "need not be premised on ownership of land or a petroleum system at the time a discharge occurs; instead, such liability may be founded either upon a potentially responsible party's capacity to prevent spills before they occur or the ability to clean up contamination thereafter." Also, the court provided that the law does not require the person controlling the site to own the contaminating tank.

Looking to the record, the court found that both petitioners had control over the subject property and that they had both known petroleum products were being utilized thereon. ¹¹ In addition, both petitioners were aware of gas spills on the property and had the ability to clean up the spills. ¹²

Conclusion

The Supreme Court, Appellate Division, Third Department, found the petitioners had control over the property, extensive knowledge of the contamination, and an ability to remediate the spills. ¹³ Thus, the court found the petitioners liable and affirmed the determination of the administrative law judge. ¹⁴

Zachary Kansler Albany Law School '12

Endnotes

- Huntington and Kildare, Inc. v. Grannis, 89 A.D.3d 1195 (3d Dep't 2011).
- 2. Id. at 1195-96.
- 3. Id.
- 4. Id. at 1196.
- 5. *Id.*
- 6. Id.
- 7. Id.
- 8. Id
- Id. (quoting State v. C.J. Burth Servs., Inc., 79 A.D.3d 1298, 1301 (3d Dep't 2010) (emphasis omitted), Iv. dismissed, 16 NY3d 796 (2011)).
- 10. Id. (citations omitted).
- 11. Id.
- 12. Id. at 1196-97.
- 13. Id
- 14. Id.

* * *

Mombaccus Excavating, Inc. v. Town of Rochester, New York, 89 A.D.3d 1209 (3d Dep't 2011)

Facts

Petitioner Mombaccus Excavating, Inc. ("Mombaccus") owns property in the Town of Rochester, Ulster County, New York, on which it operates sand and gravel mines. Respondent Town Board of the Town of Rochester, New York ("Town Board") enacted Local Law No. 4, which amended the Town's existing zoning law. Local Law No. 4 abolished unlimited gravel mining previously allowed under the zoning law and limited "full-scale mining...to natural resource zones." The law also divided Mombaccus's property into two zoning districts, which made unlimited gravel mining permissible on one portion of the property and prohibited it on the other portion.

Procedural History

Mombaccus brought a combined CPLR Article 78 proceeding and action for declaratory judgment to invalidate Local Law No. 4.⁴ The Supreme Court dismissed Mombaccus's application to review the Town Board's determination to enact Local Law No. 4.⁵ Mombaccus appealed the Supreme Court's judgment.⁶

Issues

Whether the Town Board improperly enacted Local Law No. 4?

Rationale

Mombaccus raised various arguments to attack the Town Board's enactment of Local Law No. 4. It first argued that the Town Board failed to comply with "the substantive requirements of the State Environmental Quality Review Act ("SEQRA")." To determine whether a SEQRA violation existed, the court inquired as to whether the Town Board "identified the relevant areas of environmental concern, took a hard look at them, and made a reasoned elaboration of the basis for its determination."

The court found that the Town was compliant with SEQRA in its enactment of Local Law No. 4, as its determination to enact the law was supported by sufficient evidence and it identified relevant environmental concerns. To support its finding that the Town Board complied with SEQRA requirements, the court acknowledged the various steps taken by the Town Board before its enactment of Local Law No. 4. The Comprehensive Plan, Zoning Code and Map Task Force ("Task Force") was established by the Town Board, and was responsible for the review of existing zoning regulations and the preparation of a report based on its findings. The Town Board presented the Task Force's findings and proposed amendments at various public hearings, from which it received com-

ments, and submitted them to the Ulster County Planning Board, which also contributed recommendations. Further, the Town hired a planning consultant to prepare an environmental assessment form. The assessment outlined environmental concerns, and identified how such concerns would be impacted by the proposed zoning amendments. The Town then issued "a negative declaration of environmental significance," in which it descriptively addressed areas of environmental concern.

Mombaccus also argued that Local Law No. 4 violated the Mined Land Reclamation Law, which states that it "shall supersede all other state and local laws relating to the extractive mining industry." The court dismissed this contention, reasoning that Local Law No. 4 regulates mining operations that do not require permits from the Department of Environmental Conservation, and the Mined Land Reclamation Law explicitly allows local governments to enact "laws or ordinances" to regulate mining operations that are exempt from permit requirements. ¹¹

The court also rejected Mombaccus's claims that the division of its property was inconsistent with the land's "geographic characteristics" and the Town's comprehensive plan. 12 Finally, the court found that the Town did not improperly delegate its responsibilities to the Task Force and the planning consultant, and that it did not target Mombaccus's property in bad faith. 13

Conclusion

The Appellate Division affirmed the Supreme Court's judgment in favor of the Town, finding that it was not improper for the Town Board to have enacted Local Law No. 4.

Alicia M. Alvelo St. John's University School of Law '12

Endnotes

- Mombaccus Excavating, Inc., v. Town of Rochester, New York, 89
 A.D.3d 1209, 1209 (3d Dep't) (2011).
- 2. Id. at 1210.
- 3. Id
- 4. *Id.* at 1209–10.
- 5. Id. at 1210.
- 6. *Id*.
- 7. Id.
- 8. Id. (quoting Matter of Riverkeeper, Inc. v. Planning Bd. of Town of Southeast, 851 N.Y.S.2d 76 (2007)).
- 9 Id at 1210–11
- Id. at 1211; N.Y. Environmental Conservation Law §23-2703(2) (ECL).
- Mombaccus Excavating, Inc., 89 A.D.3d at 1211; N.Y. E.C.L. §23-2703 (2)(c).
- 12. Mombaccus Excavating, Inc., 89 A.D.3d at 1211.
- 13. Id. at 1212.

* * *

State v. Getty Petroleum Corp., 89 A.D.3d 262, 933 N.Y.S.2d 114 (3d Dep't 2011)

Facts

The case concerns a petroleum spill at a gas station in the Town of Hyde Park, Dutchess County. The gas station had been operated for over thirty years and was the site of two petroleum discharges, one in 1979 and one in 1983.² Defendant M&A Realty, Inc., purchased the underground petroleum and storage dispensing system at the gas station in 1994 and purchased the rest of the property in 2002.3 In 2003 the Department of Environmental Conservation (DEC) determined that a spill occurred at the gas station in 2003.⁴ Defendant argued that the petroleum discovered by DEC was from earlier spills and was not caused by a new spill.⁵ DEC claimed that the cost of remedial measures taken in response to the spill from 2003 to 2009 was \$208,000.6 The Attorney General notified Defendant that failure to pay DEC would result in the commencement of a civil action and the filing of an environmental lien.⁷

Procedural History

Upon receiving warning from the Attorney General, defendant sought a conference or hearing regarding its position on the spill at issue. Defendant's request was denied. Plaintiff served a verified complaint commencing the action and a notice of an environmental lien was filed. Defendant moved for summary judgment challenging the lien procedures. Defendant moved for summary judgment challenging the lien procedures.

Issue

The court considered: (1) whether the absence of the word "potentially" from the statute authorizing the environmental lien (Navigation Law § 181-a (1) (a)) connoted a legislative intent to afford the defendant a judicial determination before the lien could be enforced; and (2) whether the lack of a judicial determination violated due process. ¹¹

Reasoning

The court found that the absence of the word "potentially" from Navigation Law § 181-a (1) does not require a prefiling judgment. ¹² If the legislature had intended for there to be a prefiling judgment, the court reasoned, it would have been explicitly provided for in the statute. ¹³ Furthermore, a prefiling judgment would undermine the urgent response that the provision was designed to provide. ¹⁴

To determine whether the environmental lien violated due process the court weighed the following factors: "(1) the private interest affected; (2) the risk of erroneous deprivation through the procedures used and the probable value of other procedural safeguards; and (3) the government's interest."15 The court found that the lien clouds title and affects ability to transfer property. 16 However, the court determined the risk of erroneous deprivation was low because liability "is strict, joint and several, and the statute has been broadly and liberally applied to owners of property where a petroleum discharge is discovered."17 Furthermore, defendant was given prior notice of the lien and it could be challenged within the context of the pending action or by seeking a vacatur under Lien Law § 59.18 Finally, the court found that the government's interest was strong in "protecting and preserving its lands and waters" and "ensuring reimbursement of taxpayer moneys expended in cleaning up polluted sites when the discharger is unwilling to do so on his or her own accord."19

Conclusion

The court found that the defendant had failed to show that due process was violated by the environmental lien and the motion for summary judgment was denied.²⁰

Kevin Cassidy Albany Law School '13

Endnotes

- State v. Getty Petroleum Corp., 89 A.D.3d 262, 263, 933 N.Y.S.2d 114, 116 (3d Dep't 2011).
- 2. Id.
- 3. *Id.*
- 4. Id.
- 5. Id. at 264.
- 6. Id.
- 7. *Id.*
- 8. Id.
- 9. *Id.*
- 10. Id.
- 11. Id. at 266.
- 12. Id. at 266.
- 13. Id. at 265.
- 14. Id. at 266.
- 15. *Id.* at 267.
- 16. Id.
- 17. Id.
- 18. Id.
- 19. *Id.*
- 20. Id. at 269.

* * *

New York State Superfund Coalition, Inc. v. New York State Dept. of Environmental Conservation, 18 N.Y.3d 289, __ N.E.2d __, 2011 WL 6217346 (Dec. 15, 2011)

Facts

Beginning in 1979, New York began the task of regulating inactive hazardous waste sites. Up until that point, inactive—as opposed to active—sites were not regulated by state or federal standards. Since then, the state legislature and the Department of Environmental Conservation (hereinafter DEC) promulgated legislation and regulation effecting stronger controls, most recently requiring landowners to restore properties that pose a significant threat to the environment to pre-contamination conditions. The petitioner in this matter, the New York State Superfund Coalition, is a coalition of New York state landowners who oppose the new regulatory scheme.

Procedural History

The petitioner initiated a combined Article 78 proceeding and declaratory judgment action in the Supreme Court, Albany County, alleging the DEC exceeded its statutory mandate in promulgating four new regulations. The court found for the petitioner in part, determining two of the four regulations where void as outside the scope of the statutory authority. The court found the DEC was only permitted to require remediation of a significant threat, and was not authorized to require contaminated land be restored to pre-contamination conditions. The Supreme Court, Appellate Division, Third Department reversed, finding ambiguity in the law should be read in favor of the DEC's interpretation. The Court of Appeals affirmed.

Issue

Are the recently promulgated regulations, requiring inactive hazardous waste sites to be restored to precontamination conditions, void as outside the statutory authority of the DEC?

Rationale

The Environmental Conservation Law, Section 27-1313(5)(d), provides that the remediation of inactive hazardous waste sites is to occur through a "complete cleanup," which removes significant threats to the environment and removes "imminent danger of irreversible or irreparable damage to the environment caused by such disposal." This provision was the statutory basis for the DEC regulations, subject to review, which seek to restore the sites to pre-contamination conditions where feasible, and at a minimum, to reduce significant threats to the environment. Petitioner asserted that the term "complete cleanup" in the statute provides the DEC with authority only to require remediation of the contaminated site

through removing the "significant threats," and that current regulations would require landowners to restore the site to "pre-Columbian" conditions.¹²

The DEC disavowed such a sentiment, providing that the regulations and State law factor in technical feasibility and cost-effectiveness when selecting a remedy.¹³ In fact, the questioned regulations require remediation to precontamination conditions only where feasible.¹⁴

The court noted that the construction of a statute should be such that "effect and meaning must, if possible, be given to the entire statute and every part and word thereof." The statute requires a "complete cleanup." The court found that the phrase "complete cleanup" would be unduly constrained if it remedied specific significant threats only. Thus, the DEC's broader interpretation resulted in a more "complete cleanup," and was thus contemplated by the statute.

Conclusion

The Court of Appeals found in favor of the DEC, finding that petitioner's restrictive view of the cleanup requirement was too narrow, as the statute calls for the complete cleanup of the site. ¹⁹ The regulatory requirement that sites be remedied to pre-contamination conditions, where feasible, was not outside the scope of the "complete cleanup" term. ²⁰

Zachary Kansler Albany Law School '12

Endnotes

- N.Y.S. Superfund Coal., Inc. v. N.Y.S. Dep't of Envntl. Conservation, 18 N.Y.3d 289, 292 (2011).
- 2. Id
- 3. Id. at 294.
- 4. Id. at 293.
- 5. *Id.* at 292.
- 6. *Id.* at 293.
- 7. *Id.* at 293–94.
- 8. *Id.* at 294.
- 9. Id. at 294.
- 10. N.Y. Environmental Conservation Law § 27-1313(5)(d).
- 11. *Id*
- Superfund Coalition, 18 N.Y.3d at 293, 297. Pre-Columbia was in reference to the time before Christopher Columbus arrived in the Western Hemisphere.
- 13. Id. at 297.
- 14. Id.
- 15. *Id.* at 296 (citations omitted).
- 16. *Id.*
- 17. Id.
- 18. *Id*.
- 19. Id. at 299-300.
- 20. Id.

Sierra Club; Medical Advocates for Healthy Air v. United States Environmental Protection Agency, 2012 WL 164839 (9th Cir. 2012)

Facts

In 1991, the Environmental Protection Agency (EPA) classified the San Joaquin Valley (the "Valley") in California as a "serious" nonattainment area under the 1-hour ozone standard. In 2001, the EPA reclassified the Valley as a "severe" nonattainment area after California failed to meet the one-hour ozone National Ambient Air Quality Standard (NAAQS) attainment deadline set by the EPA in a 1997 State Implementation Plan (SIP) for the Valley. California was required to submit a new SIP by May 31, 2002 and the EPA set a new attainment deadline of November 15, 2002.² After failing to meet the deadline in November of 2002, in order to avoid sanctions, California voluntarily requested that the Valley be reclassified as an "extreme" one-hour ozone nonattainment area, setting a new submission deadline of November 15, 2004 and a new attainment deadline of November 15, 2010.3 In 2004, California submitted a SIP for EPA approval that relied on the mobile source emissions data from the 2003 State and Federal Strategy for the California State Implementation Plan (State Strategy). 4 California added amendments to the 2004 SIP in 2006 and clarifications in 2008.⁵ After the EPA published the proposed rule for comments in 2008, the EPA approved the 2004 SIP on November 15, 2010 after requiring California to change its attainment contingency measures.⁶

Procedural History

The petitioners appealed the EPA's 2010 approval of California's 2004 SIP for one-hour ozone NAAQS that relied on non-current data.⁷

Issue

Whether the EPA acted arbitrarily and capriciously by approving the California's 2004 SIP for one-hour ozone NAAQS while knowing the emissions inventory data the 2004 SIP relied on was outdated and inaccurate?

Rationale

The Clean Air Act (CAA) "requires that nonattainment plans 'include a comprehensive, accurate, current inventory of actual emissions from all sources of the relevant pollutant or pollutants in such areas.'" Petitioners allege that since the 2004 SIP relied on inaccurate and outdated emissions inventory data, the EPA's decision was arbitrary and capricious and in violation of the CAA. Under the Administrative Procedural Act, an agency's actions are reviewable to determine whether it was "arbitrary, capricious, an abuse of discretion, or otherwise not

in accordance with the law." On review, the agency is required to "articulate [] a rational connection between the facts found and the choice made." ¹⁰

The Court of Appeals reasoned that because the EPA's interpretations of the meanings of the terms "current" and "accurate" are not based on the Clean Air Act but instead on a 2002 memorandum from the Office of Air Quality Planning & Standards and the Office of Transportation and Air Quality (the "Seitz Memo"), the agency's interpretation is afforded *Mead* and *Skidmore* deference. ¹¹ Under *Mead* and *Skidmore* deference the weight a court gives "an administrative interpretation not intended by an agency to carry the general force of law is a function of that interpretation's thoroughness, rational validity, and consistency with prior and subsequent pronouncements. "¹²

The Petitioners' allegations stemmed from the fact that by the time the 2004 SIP was approved in 2010, the mobile source data it relied on was no longer accurate or current. When drafting the 2004 SIP, California relied on a 2002 computer modeling tool (EMFAC2002) for emissions inventory data, which factored only emissions from heavy-duty diesel trucks registered in the state. However, for its 2007 SIP, California relied on a new computer modeling (EMFAC2007) for emissions inventory data. Unlike EMFAC2002, EMFAC2007 relied on not just trucks registered within the state but also considered where those trucks were being driven, leading to more accurate mobile source emissions estimates. However, is approved in 2010, the model of the factor of the fac

Relying on the D.C. Circuit's holding in Sierra Club v. EPA, 16 the EPA argued its decision to rely on the EM-FAC2002 data for the 2004 SIP was not arbitrary and capricious in violation of the CAA. The Court rejected the EPA's reliance on the D.C. Circuit holding in Sierra Club for many reasons. First, unlike in Sierra Club where the two data sets were complied a year apart, the EPA knew the EMFAC2007 data was available for three years before the 2004 SIP was approved.¹⁷ Second, unlike in Sierra Club, there was no increased burden on the EPA or the state in at least acknowledging the EMFAC2007 data because California already compiled the new data. 18 Finally, the Court relied on its holding in Ass'n of Irritated Residents v. EPA (A.I.R.)19 to reject the EPA's argument that its decision not to address the EMFAC2007 data was not arbitrary and capricious because the Court found that the EPA had a duty to address the adequacy of this data and explain why it was not using it.²⁰

Conclusion

The Court granted the petitioners' petition, holding that the "EPA's failure to even consider the new data and to provide an explanation for its choice rooted in the data presented was arbitrary and capricious."²¹

Ian Glick St. John's University School of Law '13

Endnotes

- Sierra Club; Medical Advocates for Healthy Air v. United States Environmental Protection Agency, 2012 WL 164839 at *3 (9th Cir. 2012).
- 2. Id.
- 3. Id.
- 4. Id.
- 5. *Id.* at *4.
- 6. Id.
- 7. Id. at *1.
- 8. *Id.* at *6 (quoting CAA § 172(c)(3)).
- 9. *Id.* at *5 (quoting 5 U.S.C. § 706(2)(A)).
- Id. (quoting Ariz. Cattle Growers' Ass'n v. U.S. Fish & Wildlife, 273
 F.3d 1229, 1236 (9th Cir. 2001)).
- 11. Id
- Id. at *5 (quoting The Wilderness Soc'y v. U.S. Fish & Wildlife Serv., 353 F.3d 1051, 1068 (9th Cir. 2003)).
- 13. Id. at *6.
- 14. Id.
- 15. Id.
- 16. 356 F.3d 296 (D.C. Cir. 2004).
- 17. Sierra Club, 2012 WL 164839 at *9.
- 18. Id.
- 19. 632 F.3d 584 (9th Cir. 2011).
- 20. Sierra Club, 2012 WL 164839 at *10.
- 21. Id. at *11.

United States of America v. David H. Donovan, 661 F.3d 174 (3rd Cir. 2011)

Facts

In 1987, the Army Corps of Engineers (Corps) inspected a parcel of land belonging to David Donovan, categorized it as wetlands, and warned Donovan that he would need a permit if he filled in more than 1 acre of his property. In 1993, the Corps inspected his land again, discovered that he had filled in part of his property without a permit, and ordered him to remove some of the fill. Donovan refused, and in 1996, the United States sued Donovan, alleging an unlawful discharge in violation of the Clean Water Act (CWA).

Procedural History

In 2006, the District Court granted summary judgment to the United States, holding that Donovan's property was wetlands. Donovan appealed, claiming that the CWA did not give the Corps jurisdiction over his land. The Third Circuit Court of Appeals remanded so that a record on the issue of jurisdiction could be developed because the Supreme Court had just narrowed the Corps' CWA jurisdiction in *Rapanos v. United States*. In 2010, the District Court granted summary judgment to the United

States for a second time, holding that under *Rapanos* Donovan's property was wetlands.⁷

Issues

Which test or tests articulated in *Rapanos* should be used to determine whether a property is "wetlands" subject to the Clean Water Act?

Rationale

The CWA makes "the discharge of any pollutant," including "any addition of any pollutant to navigable waters from any point source," unlawful.⁸ In *United States v. Riverside Bayview Homes, Inc.* the Supreme Court upheld the Corps' determination that wetlands adjacent to navigable waters were covered by the CWA.⁹ In *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers*, the Supreme Court held that the Corps' jurisdiction did not extend to intrastate wetlands, which were habitats for endangered migratory birds.¹⁰

In Rapanos v. United States, the Supreme Court decided whether "wetlands, which lie near ditches or man-made drains that eventually empty into traditional navigable waters, constitute waters of the United States within the meaning of the Act."11 The Sixth Circuit had upheld the Corps' jurisdiction, but the Supreme Court. in a fractured 4-1-4 opinion, articulated a narrower view of jurisdiction, and vacated and remanded. The dissent, written by Justice Stevens, would have upheld the lower court opinion. 12 The plurality opinion, written by Justice Scalia, characterized waters of the United States more narrowly than the dissent: as "relatively permanent, standing or continuously flowing bodies of water 'forming geographic features' that are described in ordinary parlance as streams[,]...oceans, rivers, [and] lakes," not including "channels through which water flows intermittently or ephemerally, or channels that periodically provide drainage for rainfall." 13 Justice Kennedy's concurrence, which was also narrower than the dissent and provided the fifth vote to remand, held that wetlands are covered by the CWA "if they possess a significant nexus with waters of the United States, meaning that the wetlands, 'either alone or in combination with similarly situated lands in the region, significantly affect the chemical, physical, and biological integrity of other covered waters more readily understood as navigable."14

Some circuits that have interpreted Rapanos have concluded that only Justice Kennedy's test should be used to determine CWA jurisdiction. Others have concluded that either Justice Kennedy's or the plurality's test may be used, and that the Corps has jurisdiction if either of them is satisfied. He Seventh and Eleventh circuits use only Justice Kennedy's test, reasoning that the Supreme Court in *United States v. Marks*, directed that, "[w]hen a fragmented Court decides a case and no single rationale explaining the result enjoys the assent of five Justices, the

holding of the Court may be viewed as that position taken by those Members who concurred in the judgments on the narrowest grounds"; according to those courts, Kennedy's test is narrower because it is the least restrictive of federal jurisdiction.¹⁸

The First and Eighth circuits looked to *Marks* but reasoned that neither *Rapanos* test could be considered narrower.¹⁹ The First Circuit Court of Appeals reasoned that it was unclear whether "narrower" in *Marks* could be read to mean either the ground which limits federal jurisdiction the least or the ground that avoids the constitutional issue and is thus most restrictive of federal jurisdiction. Additionally, the First Circuit reasoned that it was not even clear which test would be least restrictive of federal jurisdiction, since there may be times when the Kennedy test would be satisfied but the plurality test would not, and vice versa.²⁰

Federal jurisdiction to regulate wetlands under the CWA exists if the wetlands meet either the plurality's test or Justice Kennedy's test from *Rapanos*.²¹ A court's "goal in analyzing a fractured Supreme Court decision is to find a single legal standard that when properly applied, produces results with which a majority of the Justices in the case articulating the standard would agree." ²² Justice Stevens, in the *Rapanos* dissent, wrote:

Given that all four Justices who have joined this opinion would uphold the Corps' jurisdiction in both of these cases—and in all other cases in which either the plurality's or Justice Kennedy's test is satisfied—on remand each of the judgments should be reinstated if either of those tests is met.²³

Because the dissenters believe that jurisdiction exists under either test, though they would have chosen a broader test themselves, lower courts are given a mandate to find jurisdiction under either test.²⁴

The Government has made a prima facie case for jurisdiction under both *Rapanos* tests.²⁵ The plurality test is satisfied because channels on Donovan's land connected to navigable-in-fact waters are perennial in nature, thus "reasonably permanent," ²⁶ and photographic evidence and chemical testing establish a "continuous surface connection."27 Kennedy's test, that the wetland "alone or in combination with similarly situated lands in the region, significantly affect the chemical, physical, and biological integrity of other covered waters more readily understood as 'navigable,'"28 is satisfied by proof, inter alia, that Donovan's wetlands contribute flow to the Sawmill Branch, that headwater wetlands, including Donovan's, help to protect the Delaware Estuary, that "Donovan's wetlands help sequester pollutants...from downstream waters" and that "the wetland complex that includes Donovan's land plays an important role in the 'aquatic food web.'"²⁹

Turning to Donovan's declaration, which stated that the channels on his property got water only from rainwater runoff from the adjacent highway and were completely dry for significant periods, although those statements could potentially raise a genuine issue about whether the plurality's test was met, they fail to raise an issue regarding Kennedy's test. ³⁰ Finding no issue of material fact, summary judgment was granted in favor of the Government. ³¹

Conclusion

Property is "wetlands" for the purpose of jurisdiction under the Clean Water Act, if either of the *Rapanos* tests is met

James E. Darling St. John's University School of Law '12

Endnotes

- 1. United States v. Donovan, 661 F.3d 174, 176 (3rd Cir. 2011).
- 2. *Id*
- 3. 33 U.S.C. § 1311(a).
- 4. Donovan, 661 F.3d at 176.
- 5. *Id*
- 6. 547 U.S. 715 (2006).
- 7. Donovan, 661 F.3d at 177.
- 8. 33 U.S.C. §§ 1311(a), 1362(7).
- Donovan, 661 F.3d at 179, (quoting United States v. Riverside Bayview Homes, Inc., 474 U.S. 121 (1984)).
- Id. (quoting Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers, 531 U.S. 159 (2001)).
- 11. *Id.* (quoting *Rapanos v. United States*, 547 U.S. 715 (2006)) (internal quotes omitted).
- 12. Id
- 13. Id. (quoting Rapanos, 547 U.S. at 739) (alterations in original).
- Id. at 180, (quoting Rapanos, 547 U.S. at 742 (Kennedy, J., concurring) (internal quotes omitted).
- 15. Id. at 181.
- 16. *Id*
- United States v. Gerke Excavating, Inc., 464 F.3d 723, 724-25 (7th Cir. 2006); United States v. Robison, 505 F.3d 1208, 1221-22 (11th Cir. 2007).
- Donovan, 661 F.3d at 181 (quoting United States v. Marks, 430 U.S. 188, 193).
- United States v. Johnson, 467 F.3d 56, 62-64 (1st Cir. 2006); United States v. Bailey, 571 F.3d 791, 799 (8th Cir. 2009).
- 20. Donovan, 661 F.3d at 182.
- 21. Id. at 184.
- Id. at 182, (quoting Planned Parenthood of Southeastern Pa. v. Casey, 947 F.2d 682, 693 (3d Cir. 1991)).
- 23. Rapanos, 547 U.S. at 810 (Stevens, J. dissenting).
- 24. Donovan, 661 F.3d at 184.
- 25. Id
- 26. Id. at 185. In reaching this conclusion the court cited expert reports, submitted by the Government, that showed "a degree of soil saturation and surface ponding in wetlands during the

summer months, morphological conditions of the vegetation such as buttressing of tree trunks and formation of hummocks, the presence and density of plant species adapted to saturated soil conditions, and the presence of bed, bank, ordinary watermark and flowing water in the tributary channels" and "the existence of several organisms in the wetlands and channels, as well as the presence of certain species of fish on the property." *Id.* (internal quotations removed).

- 27. Id. at 186.
- 28. Rapanos, 547 U.S. at 780 (Kennedy, J., concurring).
- 29. Donovan, 661 F.3d at 186.
- 30. Id
- 31. Id. at 189.

Recent Legislation

An Act to Amend the Penal Law, in Relation to Creating the Crime of Environmental Damage of Property, Senate Bill 702

Introduced on January 5, 2011, Senate Bill 702 moves to "criminalize intentional or reckless damage to the environment done in the course of committing another crime." Sponsored by Senator Robach, the bill recognizes the reality that during a crime, environmental protection is an idea lost to perpetrators. For example, in August of 2010, in the process of attempting to steal copper from a spare electrical transformer, defendants drained 4,800 gallons of oil, "causing land and water contamination...at an estimated remediation cost of over a million dollars." This bill works to see the environment as a victim of the crime, and hold perpetrators accountable for their actions on that front as well by classifying environmental damage of property as a class C felony.

By approving such a bill as Bill 702, recognizing the additional crime of environmental damage and introducing an appropriate penalty, this works to deter those who wish to commit crimes from doing so in ways that will also harm the environment.

Alyssa Congdon Albany Law School '12

Endnotes

- 1. 2011 Legis. Bill Hist. N.Y. S.B. 702.
- 2. Id
- 3. Id
- 4. S.B. 702, 234th N.Y. Leg. Sess.

EPA Regulatory Relief Act of 2011, H.R. 2250

H.R. 2250, which passed the House of Representatives on October 13, 2011, would impose a legislative stay on four rules promulgated by the EPA in March 2011 that regulate emissions from boiler and process heater opera-

tions and solid waste incineration units under the Clean Air Act.¹ The EPA originally adopted rules governing emissions from such facilities in December 2000, but after court proceedings in 2001 the EPA was granted a voluntary remand to reconsider the definitions of "commercial and industrial solid waste incineration unit" and "commercial or industrial waste" contained in those rules.² In 2007, a court vacated a subsequent rule regarding those definitions, and the EPA responded by promulgating the March 2011 rules, which H.R. 2250 now seeks to stay.³

In place of the March 2011 rules, the bill would require the Administrator of the EPA, on a date 15 months after enactment of the bill, to propose regulations "establishing maximum achievable control technology standards, performance standards, and other requirements under sections 112 and 1294...of the Clean Air Act" for boilers, process heaters and solid waste incinerator units, as well as regulations "identifying non-hazardous secondary materials that, when used as fuels or ingredients in combustion units[,]...are solid waste" for purposes of sections 112 and 129 of the Clean Air Act.⁵ For each of these regulations, the bill requires the Administrator to establish a compliance date that is "not earlier than 5 years after the effective date of the regulation[.]"6 When proposing the compliance dates, the bill requires the Administrator to consider "(A) the costs of achieving emissions reductions; (B) any non-air quality health and environmental impact and energy requirements of the standards and requirements; (C) the feasibility of implementing the standards and requirements...; (D) the availability of equipment, suppliers, and labor...; and (E) potential net employment impacts." In addition, H.R. 2250 would require the Administrator to adopt definitions of "commercial and industrial solid waste incineration unit," "commercial and industrial waste," and "contained gaseous material" contained in the December 2000 rule.8

When promulgating the regulations required by H.R. 2250, the Administrator would have to "ensure that emissions standards for existing and new sources...can be met under actual operating conditions consistently and concurrently with emission standards for all other air pollutants regulated by the rule for the source category...." The Administrator would also be required to impose the least burdensome of the regulatory alternatives authorized under the Clean Air Act, consistent with the purposes of the Act and Executive Order No. 13563. 10

Paul McGrath Albany Law School '12

Endnotes

 EPA Regulatory Relief Act of 2011, H.R. 2250, 112th Cong. § 2 (2011) (The four rules are: "National Emissions Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters," published at 76 Fed. Reg. 15608 (March 21, 2011); "National Emissions Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers," published at 76 Fed. Reg. 15554 (March 21, 2011); "Standards of Performance for New Stationary Sources and Emissions Guidelines for Existing Sources: Commercial and Industrial Solid Waste Incineration Units," published at 76 Fed. Reg. 15704 (March 21, 2011); and "Identification of Non-Hazardous Secondary Materials That Are Solid Waste," published at 76 Fed. Reg. 15456 (March 21, 2011)).

- 2. See 76 Fed. Reg. 15707 (March 21, 2011).
- 3. Id. at 15707-08.
- Section 112 of the Clean Air Act governs hazardous air pollutants.
 Section 129 governs the combustion of solid waste.
- 5. H.R. 2250, § 2(a)(1)(A)-(B).
- 6. Id. at § 3(a)(1).
- 7. *Id.* at § 3(a)(2)(A)-(E).
- 8. Id. at § 4(1).
- 9. Id. at § 5(a).
- 10. Id. § 5(b) (Executive Order No. 13563 establishes a policy that our regulatory system must take into account the benefits and costs of regulation, be based on the best available science, and identify the "best, most innovative, and least burdensome tools for achieving regulatory ends." It directs agencies to use flexible approaches, ensure objectivity of scientific information, and perform retroactive analysis of existing rules. See 76 Fed. Reg. 3821 (January 21, 2011)).

Farm Dust Regulation Prevention Act of 2011 (H.R. 1633)

Proposed by Rep. Kristi L. Noem (R-S.D.) in April 2011 and passed by the U.S. House of Representatives in December 2011, the Farm Dust Regulation Prevention Act of 2011 (H.R. 1633) would place a temporary, one-year ban on changes to air regulations on course particulate matter,² known scientifically as PM10.³ The bill would also amend the Clean Air Act⁴ to exempt from regulation a category of particulate matter dubbed "nuisance dust," which would include soil-heavy⁵ particulate matter, not including dust created from coal combustion, 6 which is "generated primarily from natural sources, unpaved roads, agricultural activities, earth moving, or other activities typically conducted in rural areas." Finally, the bill would require the U.S. Environmental Protection Agency to hold public hearings, perform agricultural economic impact studies, and provide certain notices in the event that the agency proposed any changes to its rules or guidance on national ambient air quality standards (NAAQS) for particulate matter which would impact the agricultural community.8

The Senate has read the bill and placed it on a calendar, but has not acted on it. Should it pass the Senate, the White House has threatened to veto it. 10

Proponents of the bill championed it as protecting suffering farmers from impending—and potentially crippling—EPA action on PM10 regulations. ¹¹ Environmental groups have railed against the bill, calling it an attack on Clean Air Act provisions meant to protect the public against harmful soot pollution from industrial sources, coal mining, and motor vehicles. ¹² EPA's most recent

statutorily mandated five-year reviews of NAAQS for fine (PM2.5) and course (PM10) particulate matter occurred in 2006 and again in 2011,¹³ but the agency stated in late 2011 that it does not plan to change PM10 standards from their 1987 levels at this time.¹⁴ The White House called the bill an "unnecessary" response to an air standards change EPA was not planning to make, since the current PM10 standards have been adjudged to be "adequately protective of public health." ¹⁵

Laura Bomyea Albany Law School '13

Endnotes

- H.R. 1633, 112th Cong. (2011), http://thomas.loc.gov/cgi-bin/bdquery/z?d112:h.r.1633:.
- Farm Dust Regulation Prevention Act of 2011, H.R. 1633, 112th Cong. § 2 (2011).
- U.S. Environmental Protection Agency, PM10 NAAQS Implementation, http://www.epa.gov/ttnnaaqs/pm/pm10_index. html. See also 42 U.S.C. § 7409.
- The amendments would involve adding a § 132 to Part A of Title I of the Clean Air Act. See H.R. 1633 § 3.
- 5. H.R. 1633 § 3(c)(1)(B).
- 6. *Id.* at § 3(c)(1)(C).
- 7. Id. at § 3(c)(1)(A).
- 8. Id. at § 5.
- Major Congressional Actions, H.R. 1633, http://thomas.loc.gov/cgi-bin/bdquery/z?d112:HR01633:@@@R.
- Executive Office of the President, Statement of Administration Policy: H.R. 1633—Farm Dust Regulation Prevention Act of 2011, http://www.whitehouse.gov/sites/default/files/omb/ legislative/sap/112/saphr1633r_20111207.pdf.
- 11. Press Release, Testimony of Congresswoman Kristi L. Noam Before the Energy and Commerce Committee's Energy and Power Subcommittee, Oct. 25, 2011, http://noem.house.gov/index.cfm/ press-releases?ContentRecord_id=0ED0E2F5-4DBC-4937-AC10-82B7C4918605. See also Small Business & Agricultural Groups Back Farm Dust Regulation Prevention Act to Protect Rural Jobs, BLOG OF SPEAKER OF THE HOUSE JOHN BOEHNER, Dec. 8, 2011, http://www. speaker.gov/Blog/?postid=271774.
- See, e.g., John Walke, Bill Targeting EPA "Farm Dust" Myth Kills Clean Air Act Safeguards Against Industrial Soot Pollution, NATURAL RESOURCES DEFENSE COUNCIL SWITCHBOARD BLOG, Oct. 27, 2011, http://switchboard.nrdc.org/blogs/jwalke/this_week_i_ testified_before.html.
- Fact Sheet, U.S. EPA, The U.S. Environmental Protection Agency's Course Particulate Matter (PM10) Standards and Agriculture, Feb. 17, 2011, http://www.epa.gov/pm/agriculture.html.
- Letter from Lisa P. Jackson, EPA Administrator, to U.S. Rep. Amy Klobuchar, Oct. 14, 2011, available at http://www.epa.gov/air/ particlepollution/pdfs/20111014Klobuchar.pdf.
- 15. Executive Office of the President, Statement of Administration Policy: H.R. 1633—Farm Dust Regulation Prevention Act of 2011, http://www.whitehouse.gov/sites/default/files/omb/legislative/sap/112/saphr1633r_20111207.pdf.

* * *

Hoover Power Allocation Act of 2011, Pub. L. No. 112-72, 125 Stat. 777 (codified as amended at 43 U.S.C. § 619a (2011))

The 112th United States Congress enacted the Hoover Power Allocation Act of 2011 (the "Act") on December 20, 2011. The Act was proposed in order to "expand the availability of hydroelectric power generated at the Hoover Dam" by amending 43 U.S.C. § 619a, the Hoover Power Plant Act of 1984.

The Boulder Canyon Project Act of 1928 authorized the building of the Hoover Dam; the federal government relied on several southern California, Colorado, and Nevada cities and power companies to fund the project. Those who assisted with the financing of the project received 50-year power contracts. These contracts were renewed with the passage of the Hoover Power Plant Act of 1984. Prior to the Act's enactment, 43 U.S.C. § 619a stipulated three Schedules, A, B, and C, in which firms or allottees of the energy contracts were listed.

The Act now provides for a new energy resource pool to be set aside under Schedule D, allowing for new allottees in the Hoover Dam region that are not previously listed in the Schedules to enter into energy contracts. This additional pool is created by reducing the individual resource pools of all the power users listed in Schedules A and B by five percent.⁸ New allottees that are eligible include rural electric cooperatives, municipal power users, irrigation districts, and Indian tribes. ⁹ The Act also requires that any energy set aside for Schedule D allottees that is not contracted out is to be returned to the contractors under Schedules A and B proportionately.¹⁰ The new energy contracts under the Act shall commence on October 1, 2017, and will no longer be designated as "renewal contracts" as the word renewal is stricken from the statute.11

Tammy Garcia Albany Law School '13

Endnotes

- Hoover Power Allocation Act of 2011, Pub. L. No. 112-72, 125 Stat. 777 (codified as amended at 43 U.S.C. § 619a (2011)).
- 2. Id.
- 3. H.R. Rep. No. 112-159(I), at 1 (2011).
- 4. Id.
- 5. *Id.* at 2.
- 6. 43 U.S.C. § 619a(a) (2006).
- Hoover Power Allocation Act of 2011, Pub. L. No. 112-72, 125 Stat.
 777
- 8. Id.
- 9. H.R. Rep. No. 112-159(I), at 2.
- 10. Hoover Power Allocation Act of 2011, Pub. L. No. 112-72, 125 Stat. 777.
- 11. *Id.*

New York Assembly Bill 3178, 2011 N.Y. A.B. 3178

Introduced on January 24, 2011,¹ this bill works to introduce an additional section within the Environmental Conservation Law requiring "notification to the Department of Environmental Conservation of a release of [any] reportable quality of hazardous substance."² Sponsored by Senator Gary Pretlow from the Member Section, the bill first passed through the Assembly Committee and was transferred to the Assembly Committee on Codes on April 5, 2011.³ On January 4, 2012, the bill made its way back to the Committee on Environmental Conservation and is currently pending action.⁴

Prior to Bill 3178's introduction, there was not an adequate statutory scheme in place to determine with any specificity what amounts of hazardous wastes were released, which was necessary to show an Environmental Conservation Law violation.⁵ This was due to a lack of incentive for individuals to report, for if they did not report the amount then they could not be charged with a potentially more serious crime.⁶

Bill 3178 seeks to amend the Environmental Conservation Law to punish repeat offenders by adding language throughout the relevant sections to include those convicted of related environmental law infractions of the preceding ten years. Should the bill pass, the act will go into effect on the first of the succeeding month of November. A violation of this new bill would result in the charge of a class E felony.

This bill will provide individuals with the incentive to report, which can allow the Department of Environmental Conservation to begin clean-up efforts quicker, should they be needed. It is one of the first acts to make an environmental offense a serious crime punishable by serious jail time. Passing Bill 3178 will create a substantial helping hand to protecting New York residents and the environment.

Alyssa Congdon Albany Law School '12

Endnotes

- 1. A.B. 3178, 234th N.Y. Leg. Sess.
- 2. Id.
- 3. Id.
- E-Lobbyist.com, Legislative Detail: NY Assembly Bill 3178—2011 General Assembly, http://e-lobbyist.com/gaits/NY/A03178 (last visited February 7, 2012).
- 5. A.B. 3178, 234th N.Y. Leg. Sess.
- 6. *Id.*
- 7. *Id.*
- 8. Id.
- 9. *Id.*

The Power NY Act of 2011

The Power NY Act of 2011 (the "Act") is an act to amend the Public Service Law, the Public Authorities Law, the Real Property Law, the State Finance Law, and the Environmental Conservation Law. Governor Andrew Cuomo signed it into law on August 4, 2011. The purpose of the act is to "encourage private investment in clean power plants, improve public participation in power plant siting decision, reduce disproportionate environmental impacts in overly burdened communities, and expand opportunities for energy efficiency investments." To achieve this goal, the act establishes two new policies: the on-bill recovery program and the new energy siting law. As a result of the sheer size of this act, coverage will be limited to the primary provisions relating to the two new policies.

Section 23 of the act discusses severability, and asserts that "if any aspect of the bill is adjudicated by a court to be invalid, the judgment would not act to impair or invalidate the remainder" of the act.⁴ The act took effect immediately upon signing.⁵

On-Bill Recovery Program

The on-bill recovery program is an addition to the "Green Jobs/Green New York" program (hereinafter GJ-GNY), which was adopted by former Governor David Paterson in 2009.⁶ The GJ-GNY is a statewide program designed, in part, to incentivize New York residents to make their homes and businesses more energy efficient.⁷ It encourages energy efficient upgrades by offering lowcost loans, installation services, and energy audits. 8 The on-bill recovery will allow energy consumers to pay back loans for energy efficiency retrofitting through a monthly charge on their utility bill. By allowing energy consumers to conveniently repay their loan this way, it is anticipated that considerably more New Yorkers will invest in energy efficient measures. 10 Adoption of energy efficient measures will result in both a reduction in energy waste and in overall energy prices across the state. 11 This is significant because, according to a memorandum released by Governor Cuomo's office, New York State suffers from unnecessary energy waste that has resulted in New Yorkers paying some of the highest energy rates in the nation.12

The Power NY Act governs the establishment and administration of the on-bill recovery program. The meat of the regulation of the on-bill recovery program is set out in section 5 of the act, which is to amend the public service law by adding section 66-m. ¹³ More specifically, section 5 sets out the time frames and procedures for developing the program, and then discusses the guidelines for collection and billing of the charges. ¹⁴ Under this section, the Public Service Commission (PSC) is required to: (i) "within [45] days of the effective date...commence

a proceeding to investigate the implementation by each combination electric and gas corporations having annual revenues in excess of [\$200,000,000] of a billing and collection service for on-bill charges in payment of obligations of [their] customers" for energy efficiency retrofitting loans under GJ-GNY; (ii) within [150] days "make a determination establishing the billing and collection procedures" for on-bill recovery charges; and (iii) within [300] days "require such electric and gas corporations to offer billing and collection services for" GJ-GNY on-bill recovery charges.¹⁵ Furthermore, "to the extent practical, such electric and gas corporations shall utilize existing... billing infrastructure to implement their billing and collection responsibilities."16 Åt the outset, each electric and gas company offering on-bill recovery charges is required to limit the number of participating customers to 0.5% of its customers.¹⁷ This is to ensure that the implementation of the program has "not caused significant harm to the electric or gas company or its ratepayers." 18 Unless the energy efficient improvements result in more energy savings on a customer's gas bill, all on-bill recovery charges are to be collected on the customer's electric bill. 19

On-bill recovery is available to "all customers who have met the standards established by the New York state energy research and development authority [(NYSER-DA)] for participation" and "have executed an agreement for the performance of qualified energy efficiency services" under GJ-GNY.²⁰ However, the act further requires that for residential properties, the customer must "hold primary ownership or represent the primary owner... and hold primary meter account responsibility...to which such on-bill recovery charges will apply."21 In the event of a transfer in ownership of a customer's property, "the on-bill recovery charges for any services provided at the customer's premise shall survive changes in ownership, tenancy, or meter account responsibility," but, unless expressly assumed by the purchaser, "arrears in on-bill recovery charges at the time of...[transfer] shall remain the responsibility of the incurring customer."22

Section 8 of the act authorizes the NYSERDA to establish—among other things—charges to be paid by customers, late payment charges, standards for customer participation, and, under certain circumstances, maximum loan amounts.²³ Section 8 also sets out a number of requirements that must be fulfilled by the NYSERDA.²⁴ The act requires the authority to provide notice to customers of their financial and legal obligations, and any possible risks associated with, accepting loan responsibilities under the GJ-GNY program. ²⁵ Furthermore, the act requires the authority to provide notice to customers of their right to cancel their loan agreement within five days of signing the agreement.²⁶ The authority is required to "evaluate the cost-effectiveness of the on-bill recovery mechanism on an on-going basis."27 Additionally, section 11 of the act requires that any person or entity offering to sell real property that is subject to the GJ-GNY on-bill charge provide written notice to the prospective buyer of the property's obligations to the program, "the total amount of the original charge, the payment schedule,...the approximate remaining balance, [and] a description of the energy efficiency services performed" on the property.²⁸

New Energy Siting Law

The new energy siting law, detailed in section 12 of the act, will reestablish the siting process under Public Service Law Article 10, which expired in 2003.²⁹ The purpose of this provision is to "streamline the State decisionmaking process with respect to issuing a certificate for constructing and operating new major electric generating facilities having a nameplate capacity of [25,000] kilowatts or more, and modified or repowered facilities."30 Under the current system, developers are forced to deal with "multiple levels of government, the jurisdiction of multiple agencies, and various protocols."31 The act will establish a seven-member board on electric generation siting and the environment that will have the authority to adopt the rules and regulations relating to the procedures that are to be used in certifying facilities that fall under this policy.³²

Under this new policy, an applicant seeking a construction and operation certificate must first submit to the board a preliminary scoping statement and then submit a formal application. The act requires that the preliminary scoping statement include:

(a) a description of the proposed facility and its environmental settings; (b) the potential environmental and health impacts resulting from the construction and operation of the proposed facility; (c) proposed studies or program of studies designed to evaluate potential environmental and health impacts; (d) measure proposed to minimize environmental impacts;...(g) identification of all other state and federal permits, certifications, or other authorizations needed for construction, operation or maintenance of the proposed facility; and (h) any other information that may be relevant or that the board may require.³³

The application for certification must include: (c) plans for pollution control systems; (e) plans for security during construction and operation of the facility; (f) an evaluation of significant and adverse environmental impacts of the proposed facility; (g) a cumulative impact analysis of air quality within a particular distance of the facility; (h) a comprehensive study of the demographic, economic and physical descriptions of the community within which the proposed facility is to be located; and (i) a discussion of reasonable and available alternative locations for the proposed facility.³⁴ In addition, some of the

information required for the preliminary scoping agreement is also required for the formal application.³⁵

Upon receipt of the application, the board will initiate a process to determine whether the applicant should be granted a certificate to construct and operate the facility.³⁶ Within 60 days of receipt the board must determine if the application is complete, and upon finding the application to be complete, schedule a date for a public hearing regarding the proposed facility.³⁷ Hearings are required to be conducted in an expeditious manner before a hearing examiner.³⁸ There are several parties that are permitted as of right to participate in the siting proceedings before a hearing examiner; they are listed in the new section 166 of Article 10.³⁹ In coming to a conclusion, the act states that the board may not issue a certificate "absent findings a determinations that, among other things, the facility will (i) beneficially add or substitute capacity in the State; (ii) minimize or avoid adverse environmental impacts: (iii) minimize or avoid adverse disproportionate impacts; and (iv) comply with all state and local laws and regulations unless such laws and regulations are found to be unreasonably burdensome with respect to the proposed project."40 The board must issue a decision within one year from the day the application was deemed to be complete. 41 Once a final decision has been issued, the determination can be become subject to rehearing and judicial review.42

Emma Maceko Albany Law School '12

Endnotes

- Power NY Act of 2011, A. 8510, 234th N.Y. Legislative Session (2011).
- Press Release, http://www.governor.ny.gov/press/ 08042011NYLegislation.
- Memorandum from Andrew Cuomo on the Power NY Act of 2011(2011), at 5, available at http://www.governor.ny.gov/assets/ GPB21-POWER-NY-MEMO.pdf.
- 4. Power NY Act of 2011, § 23.
- 5. Id. at § 24.
- Memorandum from Andrew Cuomo on the Power NY Act of 2011, at 5; http://www.nysenate.gov/blogs/2009/sep/11/senatepasses-green-jobsgreen-ny-bill.
- New York State Senate, Senate Passes "Green Jobs/Green NY" Bill, (September 11, 2009). http://www.nysenate.gov/blogs/2009/ sep/11/senate-passes-green-jobsgreen-ny-bill.
- 8. *Id*
- 9. Power NY Act of 2011, §§ 3-5.
- Memorandum from Andrew Cuomo on the Power NY Act of 2011 (2011), at 5.
- 11. Id. at 5-6.
- 12. Id
- 13. Power NY Act of 2011, § 5.
- 14. Id. at § 5.

- 15. Id. at § 5(1)(a).
- 16. *Id.* at § 5(1)(a).
- 17. Id. at § 5(1)(b).
- 18. *Id.* at § 5(1)(b).
- 19. Id. at § 5(1)(d).
- Id. at § 5(2)(a)(the authority of NYSERDA to direct the establishment and implementation of the on-bill recovery program is granted in Section 8 of the Power NY Act of 2011).
- 21. Id. at § 5(2)(a).
- 22. Id. at § 5(2)(d).
- 23. Id. at §§ 8(1)(a)(ii), 8(1)(b)(iii)-(vi).
- 24. Id. at § 8(1)-(3).
- 25. *Id.* at § (8)(2)(e)(i).
- 26. Id. at § 8(2)(g).
- 27. Id. at § 8(3).
- 28. Id. at § 11(a).
- Memorandum from Andrew Cuomo on the Power NY Act of 2011 at 6.
- 30. Id. at 3.
- 31. Id. at 6.
- 32. Power NY Act of 2011, § 12(160)-(161).
- 33. Id. at § 12(163).
- 34. Id. at § 12(164).
- 35. Id.
- 36. Id. at § 12(165).
- 37 Id
- 38. Id. at § 12(167).
- 39. Id. at § 12(166).
- Memorandum from Andrew Cuomo on the Power NY Act of 2011 at 4; see also, Power NY Act of 2011, § 12(168).
- 41. Power NY Act of 2011. § 12(168).
- 42. *Id.* at § 12(168)–(170).

Regulation of the Conducting of Hydraulic Fracturing, A8805A

Assembly Bill A8805A, which would amend Article 23 of the environmental conservation law as it pertains to disclosure of information related to hydraulic fracturing by adding two titles, fifteen and sixteen. The bill seeks to mandate full disclosure to the state of all chemicals used in the process of hydraulic fracturing, including the concentration of each chemical. However, hydraulic fracturing companies would not be required to disclose the specific identity of any proprietary chemicals used. Additionally, under the bill, hydraulic fracturing companies would be held strictly liable in all litigation arising from the practice of hydraulic fracturing.

Dana Stanton Albany Law School '12

Endnotes

- 1. A8805A, 234th Leg. Sess. (2011), available at http://assembly.state. ny.us/leg/?default_fld=&bn= A08805&term=2011&Summary=Y&Actions=Y&Text=Y (prefiled in the Assemby, Jan. 4, 2012).
- 2. Id
- 3. Id.
- 4. Id.

* * *

Ski Area Recreational Opportunity Enhancement Act of 2011, Pub. L. No. 112-46, 125 Stat. 538 (codified as amended at 16 U.S.C. § 497b (2011))

The 112th United States Congress enacted the Ski Area Recreational Opportunity Enhancement Act of 2011 (the "Act") on November 7, 2011. The Act was proposed in order to amend 16 U.S.C. § 497b, the National Forest Ski Area Permit Act of 1986. Prior to the Act's enactment, 16 U.S.C. § 497b only allowed designated ski permit areas of National Forest to be used for Nordic or alpine skiing. The Act now allows ski permit areas to be used for other snow sports, as well as "additional seasonal or year-round recreational activities and facilities."

With the addition of other recreational uses, Congress specifically listed which activities were included, and which activities were excluded. Included recreational activities, other than snow sports, include zip lines, mountain bike trails and terrain parks, frisbee-golf courses, and rope courses. Fecreational activities that are specifically excluded are tennis courts, water slides and water parks, swimming pools, golf courses, and amusement parks. Although ski permit areas can now incorporate these new recreational activities, the Secretary of Agriculture—when determining the amount of acres to encompass a ski permit area—shall not consider an amount of acreage that would be necessary for the new activities.

The United States Forest Service has praised the Act for providing opportunities that could help boost rural economies.⁸ The United States Forest Service estimates that the Act will provide for "600 extra jobs and is expected to bring in an additional \$40 million to local communities." Additionally, the United States Forest Service also anticipates an increase in the number of visits to designated ski permit areas throughout the year because of the newly permitted activities and facilities. ¹⁰

Tammy Garcia Albany Law School '13

Endnotes

- Ski Area Recreational Opportunity Enhancement Act of 2011, Pub. L. No. 112-46, 125 Stat. 538 (codified as amended at 16 U.S.C. § 497b (2011)).
- 2. Id.
- 3. 16 U.S.C. § 497b(a) (2006).

- Ski Area Recreational Opportunity Enhancement Act of 2011, Pub. L. No. 112-46, 125 Stat. 538 (codified as amended at 16 U.S.C. § 497b (2011)).
- 5. Id.
- 6. Id.
- 7. Id.
- News Release, U.S. Dep't of Agric. Forest Serv., USDA Forest Service Welcomes Boon to Local Economies in Ski Communities (Nov. 7, 2011), available at http://www.fs.fed.us/news/2011/ releases/11/ skicomm.shtml.
- 9. Id.
- 10. Id.

* * *

Transparency in Regulatory Analysis of Impacts on the Nation Act of 2011, H.R. 2401

H.R. 2401, which passed the House on September 23, 2011, would require the President to establish a committee "to analyze and report on the cumulative and environmental impacts of certain rules¹ and actions² of the [EPA]." The Committee would be required to estimate the impacts of rules covered by the Bill with regard to the global economic competitiveness of the U.S., resulting changes in electricity and fuel prices, employment, the reliability and adequacy of bulk power supply in the U.S., and "other cumulative costs and cumulative benefits, including evaluation through a general equilibrium model approach[.]"³ The committee would also be required to discuss of the cumulative impact of the covered rules on consumers, small businesses, regional economies, state/ local/tribal governments, low-income communities, public health, labor markets, and agriculture. 4 The Committee would submit a preliminary report on these analyses and hold a comment period before submitting a final report to Congress.⁵

In addition to requiring the analysis of impacts of certain rules, H.R. 2401 also would nullify other rules and require the redevelopment of those rules by the EPA. It would make the "Federal Implementation Plans: Interstate Transport of Fine Particulate Matter and Ozone and Correction of SIP Approvals" rule, and "any successor or substantially similar rule," of no force or effect. In place of that rule, the Bill provides that the Administrator "shall continue to implement the Clean Air Interstate Rule."8 However, the Bill states that the Administrator may not issue any new rule under § 110(a)(2)(D)(i)(I) or § 126 of the Clean Air Act relating to air quality standards for ozone or particulate matter until 3 years after the Committee submits its final report, and shall "allow the trading of emissions allowances among entities covered by the rule irrespective of the State in which such entities are located." The Bill also requires that any such rule "shall establish a date for State implementation of the standards not earlier than 3 years after the date of publication of such rule."10

Other rules that H.R. 2401 would render without force or effect are the proposed "National Emission Standards for Hazardous Air Pollutants From Coal- and Oil-Fired Electric Utility Steam Generating Units and Standards of Performance for Fossil-Fuel-Fired Electric Utility, Industrial-Commercial-Institutional, and Small Industrial-Commercial-Institutional Steam Generating Units,"11 and any rules based upon that proposed rule.¹² In place of the proposed rule, the Bill directs the Administrator to issue regulations establishing national emission standards and standards of performance for steam generating units, but only after consideration of the Committee's final report and 12 months after the report is submitted to Congress. 13 The Bill requires the compliance dates for such regulations to be "not earlier than 5 years after the effective date of the regulations," and in establishing the compliance date, the Administrator must consider: the cost of achieving reductions; "the feasibility of implementing the standards and requirements"; "the availability of equipment, suppliers, and labor"; and "potential net employment impacts."14

With regard to the regulations required by the Bill for steam generating units, H.R. 2401 requires the establishment of "standards achievable in practice." For coal and oil fired electric utility steam units, the standard achievable in practice would be the "best controlled similar source for each source category or sub-category. For existing sources, the standard achievable in practice is established by the "group of sources that constituted the best performing 12 percent of existing sources for each source category or subcategory. In addition, the Administrator must impose the least burdensome regulatory alternative authorized under the Clean Air Act.

Finally, the Bill provides that the Administrator shall take feasibility and cost into consideration when establishing primary or secondary ambient air quality standards under § 109 of the Clean Air Act. 19

Paul McGrath Albany Law School '12

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The covered rules include: the Clean Air Interstate Rule and the rule establishing Federal Implementation Plans for the Clean Air Interstate Rule; "National Ambient Air Quality Standards for Ozone" (published at 73 Fed. Reg. 16436 (March 27, 2008)); "National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters" (published at 76 Fed. Reg. 15608 (March 21, 2011)); "National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers" (published at 76 Fed. Reg. 15554 (March 21, 2011)); "National Emission Standards for Hazardous Air Pollutants from Coal- and Oil- Fired Electric Utility Steam Generating Units and Standards of Performance for Fossil-Fuel-Fired Electric Utility, Industrial-Commercial-Institutional, and Small Industrial-Commercial-Institutional Steam Generating Units" (signed by Administrator Lisa P. Jackson on March 16, 7 2011); "Hazardous and Solid Waste Management System; Identification and Listing of Special Wastes; Disposal of Coal Combustion Residuals From

Electric Utilities" (published at 75 Fed. Reg. 35127 (June 21, 2010)); "Primary National Ambient Air Quality Standard for Sulfur Dioxide" (published at 75 Fed. Reg. 35520 (June 22, 2010)); "Primary National Ambient Air Quality Standards for Nitrogen Dioxide" (published at 75 Fed. Reg. 6474 (February 9, 2010)); "National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry and Standards of Performance for Portland Cement Plants" (published at 75 Fed. Reg. 54970 (September 9, 2010)). In addition, "covered" rules include any rule or guideline promulgated on or after January 1, 2009 (A) "under section 111(b) or 111(d) of the Clean Air Act... to address climate change"; (B) "by the Administrator of the Environmental Protection Agency, a State, a local government, or a permitting agency under or as the result of section 169A or 169B of the Clean Air Act"; (C) "establishing or modifying a national ambient air quality standard under section 109 of the Clean Air Act"; (D) "addressing fuels under title II of the Clean Air Act... as described in the Unified Agenda of Federal Regulatory and Deregulatory Actions under Regulatory Identification Number 2060-AQ86, or any substantially similar rule, including any rule under section 211(v) of the Clean Air Act (42 U.S.C. 7545(v)).

- 2. A covered action "means any action on or after January 1, 2009, by the Administrator of the Environmental Protection Agency, a State, a local government, or a permitting agency as a result of the application of part C of title I (relating to prevention of significant deterioration of air quality) or title V (relating to permitting) of the Clean Air Act (42 U.S.C. 7401 et seq.), if such application occurs with respect to an air pollutant that is identified as a greenhouse gas in "Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act',' published at 74 Fed. Reg. 66496 (December 15, 2009)."
- 3. H.R. 2401, 112th Cong. (2011).
- 4. Id.
- i. Id.
- 6. Published at 76 Fed. Reg. 48208 (August 8, 2011).
- 7. H.R. 2401, 112th Cong. (2011).
- Id. (The Bill defines the Clean Air Interstate Rule as "the Clean Air Interstate Rule and the rule establishing Federal Implementation Plans for the Clean Air Interstate Rule as promulgated and modified by the Administrator (70 Fed. Reg. 25162 (May 12, 2005), 71 Fed. Reg. 25288 (April 28, 2006), 72 Fed. Reg. 55657 (October 1, 2007), 72 Fed. Reg. 59190 (October 19, 2007), 72 Fed. Reg. 62338 (November 2, 2007), 74 Fed. Reg. 56721 (November 3, 2009))").
- 9. H.R. 2041, 112th Cong. (2011).
- 10. *Id*
- 11. Published at 76 Fed. Reg. 24976 (May 3, 2011).
- 12. H.R. 2401, 112th Cong. (2011).
- 13. Id
- 14. Id.
- 15. Id.
- 16. Id.
- 17. Id.
- 18. *Id.*
- 19. Id.

The Trash Free Seas Act of 2011

On November 2, 2011, the United States Senate Committee on Commerce, Science, and Transportation reported favorably on Senate Bill 1119, the Trash Free Seas Act of 2011. The act seeks to amend the previously enacted Marine Debris Research, Prevention, and Reduction Act²

by restating its purpose and revising its marine debris program. 3 Senator Daniel Inouye of Hawaii is the sponsor of this bill. 4

The fundamental nature of the Trash Free Seas Act of 2011 is to expand the Marine Debris Research, Prevention, and Reduction Act in order to include research and assessment efforts in addition to reducing or preventing marine debris. ⁵ Bearing responsibility for these added tasks would be the Administrator of the National Oceanic and Atmospheric Administration (NOAA) in tandem with other federal agencies. ⁶ Part of the research and assessment activities are certain focal areas such as "derelict fishing gear," "plastics," as well as creating inventories of marine debris and the impact it has on "marine resources, the marine environment, navigation safety, and the United States economy."

Furthermore, the NOAA Administrator would be required to initiate outreach and education programs regarding marine debris, its sources, the threats it carries, and how to effectively remove its adverse impacts on the marine environment.⁸ These programs can be coordinated with other outreach efforts effectuated under the Marine Plastic Research and Control Act of 1987.⁹ The Trash Free Seas Act of 2011 is pending.before the entire Senate body to consider it.¹⁰

Michael W. Gadomski Albany Law School '13

Endnotes

- The Library of Congress, Bill Summary & Status: 112th Congress (2011–2012): S. 1119: All Information, THOMAS, http://thomas.loc.gov/cgibin/bdquery/D?d112:1:./ temp/~bd9LN1:@@@L&summ2=m&|/home/LegislativeData. php|.
- 2. 33 U.S.C. §§ 1951–1958 (2006).
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- 5. Id.; Marine Debris Research, Prevention, and Reduction Act, 33 U.S.C. § 1952 (2006); see also Jessica R. Coulter, A Sea Change to Change the Sea: Stopping the Spread of the Pacific Garbage Patch with Small-Scale Environmental Legislation, 51 Wm. & MARY L. Rev. 1959, 1972 (2010) (discussing how this statute's measures had failed to generate a "coordinated federal effort to reduce land-based marine debris" among federal, state, and local authorities).
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- 10. S. 1119: Trash Free Seas Act of 2011, GovTrack.us, http://www.govtrack.us/congress/bill.xpd?bill=s112-1119.

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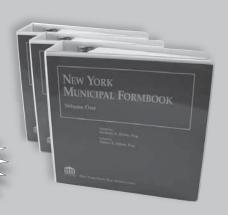
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Nancy E. Kline, Esq.
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(continued from page 3)

Accord lacks any targets or time frame to reduce carbon emissions and has aptly been described as "a historic failure that will live in infamy." The level of carbon currently in the atmosphere is around 400 ppm and rising, with no relief in sight. If every pledge made by the attending countries was put in place, by 2100 carbon levels would likely exceed 725 ppm! If we assume that every wildly optimistic carbon-reduction strategy proposed by every country to have even bothered to make a proposal was put in place, carbon levels might only reach 600 ppm. At these levels the amount of environmental destruction and human misery is too much to contemplate. I am not being hysterical when I say the problems that Mr. McKibben and so many others have detailed are present, they are measurable and they are going to get worse.

Our work in this Section is as relevant to this discussion as is the lifestyle of each member of this Section. We need to conform our way of life in private and in public, at home and at work, to this reality. I am asking you to take the time to think about the issues raised in the Questionnaire, and to go way beyond these basic questions and do what you feel you can do to be part of the solution to this enormous threat.

Recently I read a series of articles about the Internet "cloud." I do not have any questions in the Questionnaire about the cloud or Internet usage but this is another insight into the impact of the carbon footprint from our everyday lives. Most of us were under the impression that the Internet was a "green" enterprise, that sending Email and e-copies of documents and pictures was "low impact" and environmentally friendly ("save a tree!"). Think again. The fact of the matter is that the amount of energy required to run all the servers that support our Internet usage and store (the "cloud") the fantastic amount of data that we send and store every day is astronomical. Many remote farming communities across the globe are being

developed with enormous warehouses to store acres of servers to support our Internet-dependant businesses and hobbies and communications. And these servers must never be allowed to "go down" and are therefore backed by tremendous diesel-powered generators which emit huge amounts of pollution, including greenhouse gases and particulates. So what do we do about that? For one thing we can become aware of these facts, send and store fewer electronic communications and pick up the phone more often (and not necessarily a cell phone as they require "rare earth," an uncommon commodity the mining of which is environmentally destructive!). As I say, there are almost always environmental consequences to our daily actions and often these consequences are significant, especially multiplied by the billions of us who perform such actions on a daily basis and the billions of times such actions (like eating, traveling, communicating, heating/cooling our home/offices) are repeated. So please spend some time thinking about these issues.

Please fill out the Questionnaire online (yes, I know the servers will be using energy to store all this information but at least we won't be killing trees; there's always a trade-off). I also ask that you interact with us. Give us feedback. There is space in the Questionnaire for you to express yourself. We want to hear from you. And/or you can post your comments on the Section's website, and/or you can email me directly. As you can tell, I care deeply about so many issues, and I care about leading by example. I'm looking forward to working with all of you this year and I hope to hear from many of you too. Let's start with the Questionnaire. Feel free to forward it to others, even beyond our Section. The more the merrier. The Questionnaire is available through the Section's website (www.nysba.org/environmental), and more directly, here: www.nysba.org/ELSQuestionnaire.

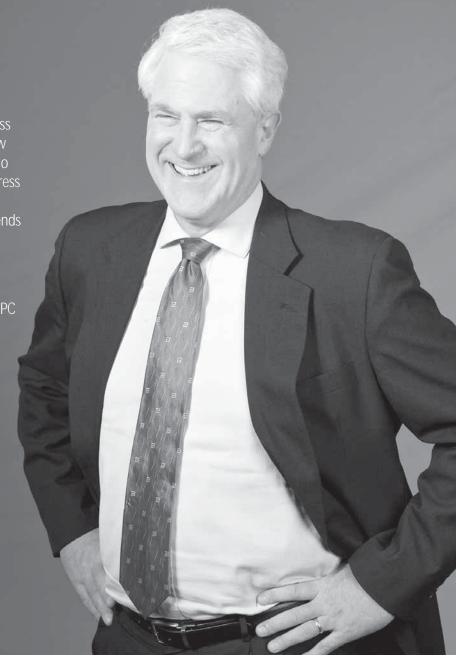
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Thomas A. Ulasewicz FitzGerald Morris Baker Firth PC 16 Pearl Street, Suite 101 Glens Falls, NY 12801 tau@fmbf-law.com

John W. Caffry Caffry & Flower 100 Bay Street Glens Falls, NY 12801-3032 jcaffry@caffrylawoffice.com

Amy L. Smith P.O. Box 687 Lake Placid, NY 12946-0687 amylsmithesq@adelphia.net

Agriculture and Rural Issues

David L. Cook LeclairRyan 70 Linden Oaks, Suite 210 Rochester, NY 14625 david.cook@leclairryan.com

Peter G. Ruppar Duke Holzman Photiadis & Gresens LLP 1800 Main Place Tower 350 Main Street Buffalo, NY 14202-3718 pruppar@dhpglaw.com

Ruth A. Moore R.A. Moore Consulting 28 William Street Kinderhook, NY 12106 rmoore49@nycap.rr.com

Air Quality

Robert R. Tyson Bond, Schoeneck & King, PLLC One Lincoln Center Syracuse, NY 13202-1355 rtyson@bsk.com

Biotechnology, Nanotechnology and the Environment

David W. Quist
New York State Department of Health
Division of Legal Affairs
Empire State Plaza, Corning Tower
Albany, NY 12237-0026
davidquist@earthlink.net

Peter C. Trimarchi Whiteman Osterman & Hanna LLP One Commerce Plaza Albany, NY 12260 ptrimarchi@woh.com

Brownfields Task Force

David J. Freeman Gibbons, P.C. 1 Pennsylvania Plaza, 37th Floor New York, NY 10119-3701 dfreeman@gibbonslaw.com

Lawrence P. Schnapf Law Offices of Lawrence Schnapf 55 East 87th Street, Suite 8b New York, NY 10128 larry@schnapflaw.com

Coastal and Wetland Resources

Reed Super Super Law Group, LLC 131 Varick Street, Suite 1001 New York, NY 10013-1417 reed@superlawgroup.com

Erica Levine Powers University at Albany (SUNY) -MRP Program P.O. Box 38023 Albany, NY 12203-8023 Erica.Powers@gmail.com

Continuing Legal Education

Maureen F. Leary NYS OAG Environmental Protection Bureau The Capitol Albany, NY 12224 maureen.leary@ag.ny.gov

James J. Periconi Periconi, LLC 260 Madison Avenue, 17th Floor New York, NY 10016 jpericoni@periconi.com

James P. Rigano Rigano, LLC 425 Broad Hollow Road, Suite 217 Melville, NY 11747 jrigano@riganollc.com

Corporate Counsel

George A. Rusk Ecology and Environment, Inc. 368 Pleasantview Drive Lancaster, NY 14086-1316 grusk@ene.com

Robert M. Hallman Cahill Gordon & Reindel LLP 80 Pine Street New York, NY 10005-1701 rmhallman@gmail.com

Energy

Kevin M. Bernstein Bond, Schoeneck & King, PLLC One Lincoln Center Syracuse, NY 13202-1325 kbernstein@bsk.com

Enforcement and Compliance

Dean S. Sommer Young Sommer LLC Executive Woods 5 Palisades Drive Albany, NY 12205 dsommer@youngsommer.com

Craig B. Kravit IVision International LLC 90 John Street, Suite 311 New York, NY 10038 ckravit@ivisioninternational.com

George F. Bradlau The Bradlau Group, LLP 315 Greens Ridge Road Stewartsville, NJ 08886 gbradlau@thebradlaugroup.com

Environmental Business Transactions

Jeffrey B. Gracer Sive Paget & Riesel PC 460 Park Avenue, 10th Floor New York, NY 10022 jgracer@sprlaw.com

Robert H. Feller Bond, Schoeneck & King, PLLC 111 Washington Avenue Albany, NY 12210 RFeller@bsk.com

Environmental Impact Assessment

Kevin G. Ryan Ryan Law Group, LLC 10 Circle Avenue Larchmont, NY 10538 kgr@ryanlawgroupllc.com

Mark A. Chertok Sive Paget & Riesel PC 460 Park Avenue, 10th Floor New York, NY 10022 mchertok@sprlaw.com

Environmental Insurance

Daniel W. Morrison III Jones Morrison LLP Penthouse 670 White Plains Road Scarsdale, NY 10583 dmorrison@jonesmorrisonlaw.com

Gerard P. Cavaluzzi Malcolm Pirnie, The Water Division of ARCADIS 44 South Broadway, 15th Floor White Plains, NY 10601 gerard.cavaluzzi@arcadis-us.com

Environmental Justice

Yelann L. Momot Bergmann Associates 28 East Main Street 200 First Federal Plaza Rochester, NY 14614 ymomot@bergmannpc.com

Peter M. Casper New York State Thruway Authority Legal Department 200 Southern Blvd; PO Box 189 Albany, NY 12201-0189 peter.casper@thruway.ny.gov

Luis Guarionex Martinez Natural Resources Defense Council 40 West 20th Street, 11th Floor New York, NY 10011 lmartinez@nrdc.org

Ethics

Yvonne E. Hennessey Hiscock & Barclay LLP 80 State Street Albany, NY 12207 yhennessey@hblaw.com Randall C. Young New York State Department of Environmental Conservation Region 6 317 Washington Street Watertown, NY 13601-3744 ryoung2934@aol.com

Global Climate Change

Virginia C. Robbins Bond, Schoeneck & King, PLLC One Lincoln Center Syracuse, NY 13202 vrobbins@bsk.com

Robin Schlaff Westchester Family Justice Center 111 Dr. Martin Luther King Blvd White Plains, NY 10601 Robiesq@aol.com

J. Kevin Healy Bryan Cave LLP 1290 Avenue of the Americas New York, NY 10104 ¡Khealy@bryancave.com

Michael B. Gerrard Columbia Law School 435 West 116th Street New York, NY 10027 michael.gerrard@aporter.com

Hazardous Waste/Site Remediation

Lawrence P. Schnapf Law Offices of Lawrence Schnapf 55 East 87th Street, Suite 8b New York, NY 10128 larry@schnapflaw.com

David J. Freeman Gibbons, P.C. 1 Pennsylvania Plaza, 37th Floor New York, NY 10119-3701 dfreeman@gibbonslaw.com

Historic Preservation, Parks and Recreation

Jeffrey S. Baker Young Sommer LLC 5 Palisades Drive Albany, NY 12205 jbaker.9118q@youngsommer.com Christopher Rizzo Carter Ledyard & Milburn LLP 2 Wall Street New York, NY 10005-2001 rizzo@clm.com

International Environmental Law

John French III 435 East 52nd Street New York, NY 10022 frenchiii.john@gmail.com

Andrew D. Otis Curtis, Mallet-Prevost, Colt & Mosle LLP 101 Park Avenue New York, NY 10178-0061 aotis@curtis.com

Internet Coordinating

Alan J. Knauf Knauf Shaw LLP 2 State Street 1125 Crossroads Building Rochester, NY 14614-1314 aknauf@nyenvlaw.com

Robert S. McLaughlin Bond, Schoeneck & King, PLLC One Lincoln Center Syracuse, NY 13202 rmclaughlin@bsk.com

Land Use

Rosemary Nichols Rosemary Nichols Law Firm 1241 Nineteenth Street Watervliet, NY 12189-1602 rosemarynicholslaw@nycap.rr.com

Edward F. Premo II Harter Secrest & Emery LLP 1600 Bausch & Lomb Place Rochester, NY 14604 epremo@hselaw.com

Michael D. Zarin Zarin & Steinmetz 81 Main Street, Suite 415 White Plains, NY 10601 mzarin@zarin-steinmetz.net

Legislation

Andrew Bridger Wilson Delaware Democratic Party 19 E. Commons Blvd New Castle, DE 19720 abwils02@gmail.com

Michael J. Lesser 50F Knights Bridge Guilderland, NY 12084-9434 mlesser@nycap.rr.com

Jeffrey D. Brown Mackenzie Hughes LLP 101 South Salina Street, Ste 600 P.O. Box 4967 Syracuse, NY 13221 jbrown@mackenziehughes.com

Membership

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Mining and Oil & Gas Exploration

Dominic R. Cordisco Drake Loeb Heller Kennedy Gogerty Gaba & Rodd, PLLC 555 Hudson Valley Avenue, Suite 100 New Windsor, NY 12553 cordisco@gmail.com

Thomas S. West The West Firm PLLC 677 Broadway, 8th Floor Albany, NY 12207 twest@westfirmlaw.com

Pesticides

Vernon G. Rail New York State Department of Environmental Conservation Region 1, Bldg. 40-SUNY Stony Brook, NY 11790 railmail@optonline.net Telisport W. Putsavage Sullivan & Wocester LLP 1666 K Street, NW Washington, DC 20006 tputsavage@sandw.com

Petroleum Spills

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Pollution Prevention

Megan Rose Brillault Beveridge & Diamond PC 477 Madison Ave., 15th Floor New York, NY 10022-7380 mbrillault@gmail.com

Kristen Kelley Wilson 30 Lake Street White Plains, NY 10603 kwilson@harrisbeach.com

Public Participation, Intervention and ADR

Gary A. Abraham Law Office of Gary A. Abraham 170 North 2nd Street Allegany, NY 14706 gabraham44@eznet.net

Jan S. Kublick McMahon, Kublick & Smith, P.C. 500 South Salina St., Suite 800 Syracuse, NY 13202-3371 jsk@mkms.com

Solid Waste

Marla E. Wieder U.S. Environmental Protection Agency Region II 290 Broadway, 17th Floor New York, NY 10007-1823 wieder.marla@epa.gov

John Francis Lyons Grant & Lyons, LLP 149 Wurtemburg Rd. Rhinebeck, NY 12572 jlyons@grantlyons.com

Toxic Torts

Cheryl P. Vollweiler
Traub Lieberman Staus
& Shrewsberry LLP
Mid-Westchester Executive Park
7 Skyline Drive
Hawthorne, NY 10532
cvollweiler@traublieberman.com

Transportation and Infrastructure

John Fehrenbach Winston & Strawn LLP 1700 K Street, Nw Washington, DC 20006-3817 jfehrenbach@winston.com

Richard J. Brickwedde Brickwedde Law Firm 211 W. Jefferson Street, Suite 26 Syracuse, NY 13202 rbrickwedde@brickwedde.com

Water Quality

Melody Scalfone Melody Scalfone, Esq. 230-302 West Willow St. Syracuse, NY 13202 scalfone@gmail.com

George A. Rodenhausen Rapport Meyers LLP 20 Spring Brook Park Rhinebeck, NY 12572-1194 grodenhausen@rapportmeyers.com

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Editor-in-Chief Miriam E. Villani Sahn Ward Coschignano & Baker, PLLC 333 Earle Ovington Blvd., Suite 601 Uniondale, NY 11553 mvillani@swcblaw.com

Issue Editors

Justin M. Birzon 104 Mt Grey Rd. East Setauket, NY 11733 justinbirzon@gmail.com

Prof. Keith Hirokawa Albany Law School 80 New Scotland Ave. Albany, NY 12208 khiro@albanylaw.edu

Aaron Gershonowitz Forchelli Curto 333 Earle Ovington Boulevard Uniondale, NY 11553 agershonowitz@fcsmcc.com

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