

Keep Cochection Green 

Presentations to the Cochection Planning Board

May 27, 2010

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Introduction

Keep Cochection Green is comprised of a group of landowners in the town of Cochection concerned about the intention of the planning board to include in its next revision of our zoning law specific permitting of natural gas extraction. The redline draft provided to the group indicates that the town intends to include the exploration and recovery of natural gas as a special use along with other extraction operations such as sand and gravel quarrying, permitting them in all rural and agricultural conservation districts, essentially 90% of the township.

Many of our concerns stem from the technique used for natural gas extraction – hydraulic hydrofracture. The documents presented here represent our initial efforts as we work toward understanding the profound implications this technology will have on our town. We are aware of the industry that is coming our way and we want to do our part to help the planning board and our fellow residents and landowners grasp the scope of the changes to come.

We look forward to the planning board’s final recommendations to the town council and will do our best to educate ourselves and our neighbors and encourage their participation and attendance at future public hearings on this critical issue that impacts each and every resident and landowner in Cochection.

EPA study, Royalties and Patriotism

Jeffrey Rose
Cochecton, NY

Let me start by saying that I have the greatest respect for civil servants at all levels. As the son and brother of police officers I understand the weight of the public trust. And I appreciate the level of distrust many people have for those entrusted with it. In these fiscally perilous times our planning board carries a heavy burden. How do they balance a community's economic opportunities with the health and well being of its most precious resource – its citizenry?

You have many issues to consider and many of my friends and neighbors will have raised them tonight. But with all due respect, you are not qualified to assess the impact of hydraulic hydrofracture on the town's drinking water. Neither am I, neither is Mr. Shepstone, Mr. Noel van Swol or Mr. Wes Gillingham of Catskill Mountain Keeper. Nor is any one person in this room.

The EPA has undertaken a study to examine the relationship between hydraulic fracturing and drinking water resources. There are bills before the State Legislature and Senate calling for a moratorium on any drilling of this kind in NY until the completion of this study.

Mr. Shepstone, whom the town has hired to advise the planning board on our zoning and subdivision law, and his family have already leased their land in Pennsylvania. His bias in favor of hydraulic hydrofracture is a matter of public record. On his Web site, Mr. Shepstone dismisses all moratoria as "anti-planning madness". But all moratoria are not created equal.

I question why Cochecton would choose to be the first town in our county to include gas drilling in its zoning before the completion of the EPA study or the resolution of these bills. Even before the DEC releases the final SGEIS.

The comparison of hydraulic hydrofracture with subsurface mining such as quarries astounds me. Dimock Township, PA (which is similar in size and population to Cochecton) has 60 wells within the township. Before the disaster there, that has so far destroyed the lives of 14 families, Cabot alone had planned to drill another 100 wells in the township in 2010. If an international cartel came to town and said they wanted to open 160 quarries in Cochecton would you even consider it? Would you expect any less of a reaction from the residents of this town?

Sure, owners or conglomerates having a hundred acres or more will make a good deal of money, they may get rich and be able to afford to move off the shale. The small land owners certainly will not. The majority of residents do not have large parcels, but they may be forced into participation through compulsory integration. They are likely to be granted royalties of

around 12.5 percent. It is worth taking a look at the royalty calculator on Geology.com (<http://geology.com/royalty/>). Even the most productive wells are likely to yield less than \$100 per month per acre. If someone has a home on 5 acres and they are forced into participation they are likely to get less than \$5,000 a year before taxes. But not before the gas company recoups its investment. At 2.5 million dollars per horizontal wellhead, this could take years. Will that be fair compensation if Cochection ends up like Dimock, Pennsylvania or DISH, Texas or Rifle, Colorado? Will we be able to sell our homes once this gets ramped up and we're living in an industrial zone?

It is the large landowners willing to get in bed with the international energy cartels that will clean up financially and the rest of us will be left with the mess.

We read in the press about how natural gas will save us from dependence on foreign oil. But this gas isn't destined for your car. Yes, some people heat their homes with natural gas but how many people in this room right now plan to convert to natural gas heating systems in their homes? It's true, it burns cleaner than coal (also an American product) in our electrical power plants but the safety of this type of gas extraction remains unproven. The fact is the exploitation of the Marcellus Shale will do little to alleviate this country's dependence on foreign oil. Wrapping this issue in the flag is disingenuous and insults my patriotism.

In summary, this is not about city slicker tree hugger vs. long time resident. This is a public health issue. It is not elitist to expect NY State to wait until the EPA completes its study on the impact of this type of drilling on our drinking water, the first peer-reviewed study of its kind. It's not about Saudi Arabia, Iraq or Iran. It's about the water, it's about life in this town, and yes it's about the economy, but mostly, it's about water. Let's give science a chance to evaluate the safety of these technologies before it is explicitly zoned in this beautiful town, the town I chose 11 years ago to call my home, the place where I thought I would spend the rest of my life. Hydraulic hydrofracture casts doubt on that and it throws some heavy shade on the future of life in the Catskills.

Health Risks for Children and Families

Brad and Jackie Rutledge,
Cochecton, NY

As homeowners and proud residents of Cochecton, we are seriously concerned about the natural gas drilling lease signed a quarter of a mile from our house on County Road 114. As we understand it the landowner is a Massachusetts resident, there is no home on the property, and it is only used for hunting on a seasonal basis. We don't begrudge anyone the right to utilize their land in any manner they choose, however when their decision could detrimentally impact my family, our health, and value of our home, we take serious issue.

As parents of 2 small children, Annabelle 6, and Matthew 3, we are extremely concerned about the potential impact of diesel fumes on their health. As there will be a significant increase of heavy diesel truck traffic on County Road 114 as well as the diesel fuel utilized in the big drilling compressors themselves, we can't help but worry about the short and long term impacts on our children's health. A report released by the Clean Air Task Force (CATF) states that diesel soot can degrade the immune system, interferes with hormones which can cause reproductive problems, causes serious impairment of the nervous system, and induces allergic reactions. It can also potentially interfere with proper lung growth and development in children. According the American Lung Association, "The health risk from diesel exposure is greatest for children and people who work or live near diesel exhaust sources. Studies have shown that the proximity of a child's residence to major roads is linked to hospital admissions for asthma and other respiratory problems."

The potential health issues above notwithstanding, we are also concerned about the sheer increase of truck traffic on our road. We are worried about our children's safety as they play outside. With the additional truck traffic, God forbid, one of them should walk in or too closely to the road. Let's not forget about how loud diesel trucks are. We bought our home in the town of Cochecton due to its beauty, rural charm, and above all serenity. That peace and quiet will be destroyed if this drilling is approved. We moved from Phoenix Arizona to Cochecton in 2005 to get away from the noise.

We sincerely hope that the Planning Board considers our legitimate concerns and those of our neighbors. Natural Gas is not a renewable energy source and we can do better! The potential health risks associated are too many to ignore. We love where we live, but may have no choice but to leave if the proposed drilling occurs.

Emergency Management

Reid Badger
Lee Badger
Cochecton, NY

My name is Reid Badger. My wife, Lee, and I have owned a home in Cochecton for nearly eight years. This is not the first time that our home and the quality of our life here have been threatened. This time we want to address concerns that we, and many of our neighbors have, regarding the readiness of Cochecton's Comprehensive Emergency Management Plan to handle the potential hazards associated with gas drilling.

Federal law requires that municipalities develop and implement hazard mitigation plans in order to obtain future FEMA grant monies.¹ The 2007 Cochecton plan sets forth the basic requirements for managing emergencies in the Town of Cochecton, including prevention before an emergency occurs, timely and effective response during an emergency, and provision of both short and long term recovery assistance afterward. While the 2007 Plan identifies hazards resulting from acts of nature, like windstorms and floods, and human error, like car or truck accidents, it does not recognize or address any of the potentially hazardous impacts of industrial gas drilling.

In 2008, Former Acting Supervisor Richardson reported that the Town of Cochecton had held a National Incident Management System meeting where gas drilling exploration was discussed.² The group was reported to be concerned with getting procedures in place to meet any gas drilling emergencies that would involve local fire and ambulance personnel. What is the current status of this emergency management preparation?

On a related note, studies of other rural areas experiencing rapid industrialization from gas drilling have found not only high cost-of-living increases (especially in housing and rent), but a rising numbers of medical visits, ambulance trips, and crimes resulting from the influx of temporary workers.³ Are we prepared?

While the government mandates that our Emergency Management Plan itself be updated every five years,¹ which, in Cochecton's case, would be in 2012, we cannot wait until then. A revised town plan needs to include an analysis of the potential hazards of high-volume hydraulic fracturing (the particular method used by the gas companies) and an assessment of the capabilities of the town to deal with them. And it needs to be approved and in place before any phase of the drilling process begins.

Emergency management and response will be unusually challenged by gas drilling operations. Town government is charged with providing "leadership and direction to prevent, mitigate, respond to and recover from dangers and problems arising from emergencies." Not only are the potential hazards from drilling numerous, and the impacts widespread, but the often remote locations

chosen present real problems in terms of access by fire, medical, police, and other emergency responders.⁴ As demonstrated by recent experiences in Louisiana,⁵ and New Mexico,⁶ among other places, community evacuation may be required in some extreme situations. Planning for that eventuality should be included.

Management and response operations in our town of Cocheton are the responsibility of the Cocheton Town Board. The Town of Cocheton Supervisor, in his capacity as Emergency Manager, together with an Emergency Management Team (principally the remainder of the Town Board), are designated to coordinate all emergency management activities of the Town. Since an emergency response organization may be required to respond to a rig location for a fire, or more likely a medical emergency,⁴ they must be prepared to deal with a worst-case scenario. In a Colorado rig fire, for example, one of the biggest barriers to emergency management was the inability to get equipment and personnel onto the location due to the rugged terrain.⁴

Towns will need to increase the number of emergency response personnel and their training to be able to deal with spills, chemical fires, explosions, and traffic accidents. Toward this end, the town of Cocheton Supervisor and Emergency Management Team is charged to arrange for periodic training programs for these town emergency response personnel. Training is to be designed to provide emergency personnel with the variety of skills necessary to help reduce or eliminate hazards and increase their effectiveness to respond to and recover from emergencies of all types, including crisis situations. Most traditional fire departments, for example, are accustomed to the basic home fire--but very few drilling rig fires can be put out by spraying water and foam at them. What is the status of these trainings?

We residents of Cocheton need to know: Do we have the necessary sophisticated equipment and readily-available expertise in Cocheton? Will our local hospital be staffed with medical personnel knowledgeable about burns and other outcomes of chemical exposure? Have the members of the management team taken advantage of emergency training opportunities? If the Town is not able to adequately respond to emergencies, Sullivan County response operations will need to be asked to assume a leadership role. Is the Town Board prepared to take on this responsibility, or, if not, to depend of the resources of the cash-strapped County?

These are not moot questions. We just need to look at the experiences of numerous communities across the US to anticipate what kinds of gas drilling hazards and emergencies we must be prepared for. For just a few examples:

1. A nurse in Denver, at Mercy Regional Medical Center, fell gravely ill from chemical exposure after treating a sick gas-field worker in the emergency room. The ER nurses called a Code Orange, which locks down the emergency room and brings in the fire department and hazardous-materials crews. The nurse estimated that she had inhaled chemicals for just five to 10 minutes. Over the next few days, that chemical exposure led to liver, heart, lung failure. The gas company refused to disclose which chemicals, information that would have helped treatment. After many weeks of grave illness, she wanted to share her experience at a hearing of the Colorado Oil and Gas Conservation Commission, but commissioners, by a vote of 4-5 decided not to allow her testimony.⁷

2. In Candor, N.Y., Fred Mayer found that explosive vapors issued from his tap along with the water. Mayer demonstrated by using a charcoal grill lighter to ignite water running from his kitchen faucet.⁸
3. In Dimock, Pennsylvania, workers had been plumbing natural gas deposits from a drilling rig a few hundred yards from Norma Fiorentino's well. They cracked the earth and pumped in fluids to force the gas out. Somehow, stray gas worked into tiny crevasses in the rock, leaking upward into the aquifer and slipping quietly into Fiorentino's well. Then, according to the state's working theory, a motorized pump turned on in her well house, flicked a spark and caused a New Year's morning blast that tossed aside a concrete slab weighing several thousand pounds. Also in Dimock, several drinking water wells have exploded and nine others were found with so much gas that one homeowner was told to open a window if he planned to take a bath.⁹
4. Near Cleveland, Ohio, an entire house exploded in late 2007 after gas seeped into its water well. The Ohio Department of Natural Resources later issued a 153-page report that blamed a nearby gas well's faulty concrete casing and hydraulic fracturing for pushing methane into an aquifer and causing the explosion.⁹
5. In the small town of Dish, Texas, where numerous pipelines and compressor stations have been built in recent years, there has been a corresponding die-off of trees, livestock have died of mysterious causes, and humans are developing a range of unusual medical problems. In 2009, these reports of human illness and animal deaths led the town to spend 15% of its annual budget on an air quality study, by an independent environmental consulting firm, of the effects of gas wells and compressor stations within the town. The study found the "presence in high concentrations of carcinogenic and neurotoxin compounds in ambient air near and/or on residential properties."⁹

These incidents, among many, illustrate the imperative that, before any heavy use of our roads, any clearing of our forests, any drilling, or any hydrofracturing is begun:

- Cocheton's Emergency Management Plan be thoroughly revised, made available to, and approved by the Town's residents;
- The Board communicate with the public about the importance of registering on-line with NY-Alert to secure receipt of notifications of emergencies;
- We be provided with a list of operational telephone numbers and email addresses of management contacts and especially emergency contacts that can be called in the event of an incident near or at a drill site;
- We be assured that each well site has a 911 address and access information (gate and lock locations plus access) to ensure that emergency response units can access the site.
- Emergency management personnel know the contents of the fracturing fluids, to know how to treat injuries, and protect the health of emergency personnel, medical staff, and community residents;
- The Cocheton emergency management staff must interact with DEC Region 3 Office and the Mineral Division of the DEC to understand the use of blow-out-preventers during drilling operations. This is in order to understand how to control unexpected flows of gas which could result in fires. Along with the DEC, municipal emergency management staff should witness a blow-out-preventer test prior to drilling;

- Local emergency management personnel should understand the gas flaring procedure and the layout of flow lines; and so on...

And, One More Thing:

It is extremely important to be aware that there will be no money – ***not a dime*** – flowing to the Town of Cocheton in support of any of these hugely expensive activities until sometime **after** the forested land has been cleared and leveled, the drilling itself has been completed, and fracturing has been long underway at each well site. Only when, and **if**, the well results in the actual **production** of gas (and many wells may not), will the Town realize monies to offset these huge, yet essential, emergency management preparation activities and on-going expenses. **Who will pay these costs? Will local taxes increase to subsidize the gas companies?**¹⁰

Endnotes

1. Gas Drilling: Sullivan County's Hazards Mitigation Plan Open Salon.mht
2. Upper Delaware Council Project Review Comm. Meeting minutes, Sept. 23, 2008, http://www.upperdelawarecouncil.org/pdf/project_min/2008/pr908.pdf
3. [http://www.tcgasmap.org/default.asp?metatags_Action=Find\('PID','5'\)#Economic%20and%20Social%20Impacts](http://www.tcgasmap.org/default.asp?metatags_Action=Find('PID','5')#Economic%20and%20Social%20Impacts)
4. Oil and Gas Drilling hazards, Occupational Health and Safety (OHS), <http://ohsonline.com/articles/2009/07/01/oil-and-gas-drilling-rig-hazards.aspx>
5. <http://dearsusquehanna.blogspot.com/2010/04/louisiana-residents-evacuated-due-to.html>
6. Driller refuses to disclose chemicals that would have helped treatment, The Durango Herald, July 17, 2008 By Joe Hanel | <http://www.commongroundunited.org> 18 May, 2010)
7. Oil and Gas Drilling Rig Hazards: Jonathan Pennington, Paul Pennington, Jeffrey Bennet, July 2009, Occupational Health and Safety.mht
8. Officials in Three States Pin Water Woes on Gas Drilling by Abraham Lustgarten, ProPublica - April 26, 2009 7:00 am
9. Riverkeeper Appendix I Case Studies: Impacts and Incidents Involving High-Volume Hydraulic Fracturing From Across the Country. www.riverkeeper.org/wp.../Riverkeeper-DSGEIS-Comments-12-28-09.pdf
10. Preparing For Natural Gas Development: Understanding Impacts And Protecting Public Assets, Report Prepared by The Gas Drilling Task Force, http://www.catskillcitizens.org/sc_prepares.pdf

Some Serious Legal Problems

Grace van Hulsteyn
Cochecton, NY

I'm going to take the board (both boards) at the words that I heard at the meeting last month; that is, that the board's position is that it must allow natural gas drilling because it will be unlawful not to. Based upon that position, the town is in the process of changing our zoning to expressly permit gas drilling in all RU and agricultural conservation districts. I think that this is a serious mistake, for a number of reasons.

I am an attorney retired from private practice in real estate law. I have a blog on gas drilling issues, at Gracenomics, on Blogspot, and have done some research on town powers with respect to gas drilling. My conclusions are very different from the board's. That's why I urge the town to consult experienced New York zoning counsel (and I don't mean me) before proceeding any further.

Meanwhile, I have three observations to pass on to give you pause. They're discussed here in my written comment, in case I don't get to them all:

(1) zoning power is unique and will be the town's best friend in this arena. It must not be cashed in as to some 90% of the town's land area, even subject to special use restrictions.

(2) the board, and we, will not get into trouble if the Zoning Resolution says nothing about gas drilling, which is what it does now. With this amendment, I think we will all get into trouble.

(3) The board needs to take another look at Town Law. I think the amended ZR conflicts sharply with the town's obligations under Town Law Section 263.

The elephant in the room at this meeting, and in meetings of towns all over the Marcellus area, is a single sentence in the state's oil and gas law, which says: "The provisions of this article (the oil and gas law itself) shall supersede all local laws and 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 tax law."

This sentence has been in the state law since 1974. Think the legislature wrangled over this ("Can we do this, in a home rule state?")? No, it didn't. This was nothing more than a casual giveaway. The oil industry wanted one-stop shopping and got it. The only document in the legislative file points to this. The legislature didn't even follow the constitutional rules (NYS Const Art 9) that require a law limiting local government powers to be passed in two legislative sessions.

A sentence substantively like the giveaway was put into another law called the Mined Land Reclamation Law, which governs gravel and other rock mining, and I'll be coming back to that.

Fast forward 36 years. The ramifications of the oil 'n gas giveaway have suddenly become staggering. The provision has been tested only in a trial court action that provides little guidance. See Envirogas, Inc. v. Town of Kiantone, 447 N.Y.S. 2d 221 (1982). A literalist view still holds that it prohibits towns from doing anything at all to control gas drilling, apart from levying property taxes and providing some protections for its roads. I take this to be the reason the board believes it must allow gas drilling here.

That is only one view. Right now there is a lively debate among zoning and planning specialists on what the language really means and how much local control remains exercisable. A more "open" view is expressed in the law review article I gave the board last month.

In the mining law, the giveaway has been tested, twice in New York's highest court, the Court of Appeals. [Frew Run Gravel Products v. Town of Carroll, 524 N.Y.S. 2d 25 (1987); Gernatt Asphalt Products, Inc. V. Town of Sardinia, 642 N.Y.S. 2d 164 (1996). Note that the language of the supersession provision was amended by the legislature to conform, between and after these decisions.] The court emphasized, both times, that zoning is not a local law relating to the regulation of the (mining) industry. "Zoning regulates land use," something that is completely different. And in both cases it upheld zoning restrictions that excluded new mining operations in one or more of the towns' districts – all, in the second case.

These mining law cases, unfortunately, are not what lawyers call "on point", because the giveaways are in different laws, and the impacts of mining and gas drilling are seen as different. So, the law is unsettled and we still don't know what the statute means and what our towns are free to do to control gas drilling.

Until the law becomes settled, we need to especially cherish our town's zoning power, not give it away. The amendment does give it away, as to 90% of our town's land. I understand, the permitting is as a special use. That won't help, I think. A corollary to the Court's rulings on zoning is that, when a town permits a use and attaches conditions to it, the conditions likely will be struck down. That is because the conditions usually do "relate to the regulation" of the industries: their practices, operations, activities – the things that the DEC oversees, or is supposed to oversee. So, I'm afraid the zoning amendment will have the opposite effect from what the town wants.

That's point 1. Point 2: Please understand that I am not advocating that gas drilling be zoned out. I would agree that that's a red flag and might be seen as targeting the particular industry, which is a no-no. Rather, and this is my second point, there is a huge and dangerous difference between an express invitation, which is what is in the making here, and the gas-neutral position that is in our current zoning. The current resolution simply says nothing about gas drilling.

Leaving the resolution as is will clearly not violate the law, even as the literalists read it: the failure to mention a particular use or class of uses cannot reasonably be interpreted to mean it is automatically disallowed. If the Town is worried about that, it can insert generic language that says failure to mention particular types of use does not imply either that they are permitted or that they are not.

I am fearful, of course, that expressly allowing drilling in the town will lead to uncontrolled pillage. No other town around us is hanging out a welcome sign, so why would gas companies not want to converge on this tiny rural plot on the Delaware and turn it into a Gomorrah on the River Styx? You yourselves conceded at last month's meeting that, once the door is open, you will not be able to close it.

So I say, leave the zoning resolution as it is. Don't make any provision for gas drilling.

Point 3: The last point I want to raise is that there is settled, applicable law in effect, with which the town must comply and which conflicts with Cochection's apparent interpretation of the unsettled law I've been discussing.[which is to say, the town is legally compelled to open itself to drilling] I'm referring to Town Law, which, like the ECL, is part of the Consolidated Laws of New York State. No town should be making decisions based on unsettled law while falling afoul of Town Law section 263, which states what MUST be in a town's zoning law. These "musts" are entirely inconsistent with permitting deep-shale gas drilling with high-volume hydrofracking whose ill-effects are all too well known, in 90% of the town. Here are some of the "musts" included in Section 263, taking into account that "shall" in a statute means "must":

Zoning shall be designed to lessen congestion in the streets. Surely the 'design' takes into account uses that are permitted in the zoning resolution. How will it be possible to lessen congestion in the streets with hundreds of trucks cramming our by-ways 24/7?

Zoning shall be designed to secure safety from fire, flood...and other dangers. Without large-scale protective services, it will not be.

Zoning shall be designed to promote health and the general welfare. Allowing deep shale gas drilling will not promote health. Or the general welfare, but that is secondary to health and safety (see Village of Euclid v. Ambler, 272 U.S. 365). Notably, preserving property values has long been ruled a valid zoning purpose, Wolfson v. Burdens, 241 N.Y. 288 (1925). So, what about expressly permitting a use that is guaranteed to lower them?

(Zoning shall be designed to prevent the overcrowding of land. Here I mention something I learned from a recent Audubon Magazine article. You might think that, because one horizontal gas well requires the operator to have assembled a 640-acre (same size as a square mile), that there will be no more density than one well per square mile. Think again. The statute allows for "infill" wells. The article's author had uncovered information on one square-mile spacing unit in Pennsylvania has NINE wells on it. Is that overcrowding? I'd sure say so. Could the town

prohibit that? I can't see how.)

In short, I think the amended zoning resolution, insofar as it expressly permits gas drilling as presently practiced – and, to boot, permits man-camps as an accessory use – is a dangerous misstep for our town to be taking. I strongly urge that these amendments be dropped.

Cochecton should join with New York towns and the NRDC in seeking a ruling on town powers.

NRDC and Legal Representation

Brenda Seldin
Narrowburg, NY

My name is Brenda Seldin, and I am a property owner in Fosterdale and a full-time resident of Narrowburg. I am asking this Board to stop and take a step back from the creation of zoning language in regards to gas drilling.

Currently, there are many pieces of legislation addressing the issue of gas drilling in NYS, from a bill that would impose a moratorium on gas drilling for 120 days after a two year EPA study on the effects of hydrofracking (A10490 and S7592) to a bill that would give municipalities more home rule (A10633).

While the Cohecton Town Board might have the best interests of the township at heart, the fact is that you do not have the muscle power to back up any zoning language that falls outside the area of roads and property taxes.

Even something as simple and as rational as the control of noise and light pollution by the gas drilling operations probably would not legally hold up and could not be implemented.

I have spoken with three lawyers, two of whom are with non-profit environmental legal groups, they all declared such zoning language to be very "iffy" in light of the narrow scope of zoning power that municipalities currently have.

By writing any zoning language in regards to gas drilling, we are risking the implementation of zoning law that can be easily overturned, or worse, the creation of zoning law that will not be as strict as might be made possible after future legislation is enacted.

I believe that instead of creating zoning language, we should instead have Cohecton Township take part in an initiative spearheaded by the environmental legal group National Resources Defense Council (NRDC) to help give NYS municipalities more power in their abilities to zone gas drilling on their home turf.

NRDC has obtained a law firm whose specialization is in the area of local land use and municipal authority matters. The idea is to form a coalition of municipalities that would share the cost of retaining legal counsel,

"This collective undertaking could include: (1) drafting model ordinances related to, e.g., zoning, road use, and other local impacts; (2) participation in any litigation challenging such

ordinance(s); and/or (3) advancement of a legislative strategy to address any identified gaps in existing municipal authority."

In summary, I urge the Board of Cochection Township to hold off from creating any zoning language in regards to gas drilling, and instead take a team approach with other NYS municipalities and be part of the NRDC initiative to fight for our rights to zone gas drilling. The unimpeded gas drilling and its subsequent consequences (the possible metamorphosis of the Town of Cochection into the next Love Canal) that this current zoning language invites is something that we all can't afford and will not be able to undo.

To: Brenda Seldin [BrendaSeldin@hvc.rr.com]
From: Kate Sinding [ksinding@nrdc.org]

Hi Brenda:

As discussed, following is a brief description of the work we are trying to do with municipalities:

With the prospect of extensive new natural gas production from New York's Marcellus Shale looming on the horizon, one issue that has garnered significant attention is the extent to which municipalities can limit or control drilling within their jurisdictions through enactment of local ordinances.

Some have opined that statutory preemption language under the Environmental Conservation Law is so broad as to preclude municipalities from enacting ordinances that do anything more than establishing road regulations for vehicles associated with natural gas production activities or imposing local property taxes on gas production sites. Others have opined that the preemption is less extensive, allowing municipalities to enact zoning ordinances controlling where gas drilling activities could occur. (*See* http://www.woh.com/img/newsletter/newsletter_4827464625.pdf.)

Still others are pressing for new state legislation that would make clear that municipalities have broader regulatory powers over gas production activities. (*See*, for example, A.10633 <http://assembly.state.ny.us/leg/?default_fld=&bn=A10633%09%09&Summary=Y∓Text=Y> , introduced by State Assembly Member Barbara Lifton.)

NRDC would like to help facilitate development of a coalition of municipalities interested in probing the extent of municipal power to regulate gas production activities. This collective undertaking could include: (1) drafting model ordinances related to, e.g., zoning, road use, and other local impacts; (2) participation in any litigation challenging such ordinance(s); and/or (3) advancement of a legislative strategy to address any identified gaps in existing municipal authority. Our hope is that we can identify a sufficient number of localities who would be willing to participate in a coalition to retain legal counsel (hopefully at a reduced rate) to assist in some or all of these efforts.

We have solicited a proposal from a law firm with significant expertise in local land use and municipal authority matters, which, upon receipt, we will be happy to make available to interested municipal officials.

Please feel free to contact Kate Sinding at ksinding@nrdc.org or 212-727-4524 with any questions or to express interest in participating in this coalition effort.

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The Coalition of Local Municipalities

Jane Roth
Cochecton, NY

I am Jane Roth and I live in Cochecton. Recently I was told about a small town with an industrial plant. When some residents complained about the smell from the plant they were told it was the smell of money. I think in the near future residents of Cochecton may have the opportunity to hear or to say those words. With gas drilling a few will see the money but most, if not all Cochecton residents will see, smell, hear, feel or otherwise suffer the noxious effects of gas drilling which have been well documented elsewhere and which have been directly experienced by the residents of Braddock County and Dimock, Pa. as well as numerous places in the American west and southwest where hydrofracking has been underway for years.

Currently the local environmental review process for establishing a dog kennel or a Dairy Queen in our town is more stringent than the local review for sinking a hydrofracking well which will use millions of gallons of water and chemicals, some identified and some not. The noise of your neighbor's barking dogs is more easily regulated than the noise for a gas drilling compressor. This lack of municipal authority makes it very difficult for our elected town officials to carry out their responsibilities to protect the residents and our environment in Cochecton.

Now, however, there is an opportunity for our town officials to participate in an effort to strengthen local control. The National Resource Defense Council is forming a coalition of local towns to work together with a law firm to determine the extent of local authority in relation to gas drilling; to develop model local ordinances; and to defend those ordinances against challenges. With the participation of many towns the cost of this legal strategy would not be prohibitive and the benefit of knowing the extent of municipal authority with regards to all the issues raised by gas drilling is, as the commercial says, priceless. It is in the best interest of all residents of Cochecton, whether they are for or against gas drilling, for our elected officials to know the extent of their authority when dealing with the complex issues involved in gas drilling.

It is equally important for the town not to make any changes in zoning until the extent of local municipal authority is known with more certainty. For example the zoning changes refer to controlling the noise from the compressors and other machinery used in gas drilling but it is not at all clear that the town will be able to control this noise since doing so would involve the town in regulating gas drilling activities which is prohibited under state law.

Some town officials have said that the proposed zoning changes do not change anything. If that is correct then why do it? If that is not correct making the proposed zoning changes prior to the findings of the EPA regarding the impact of hydrofracking on clean water; prior to the release of the DEC environmental impact report; prior to the resolution of bills A10490 and A10633

currently before the state legislature; and prior to knowing the extent of municipal authority would be foolish in the extreme. Making decisions based on incomplete information is never a good idea and frequently leads to unintended consequences which, in this instance, could be detrimental to the health and safety of the residents of Cocheton as well as the lands on which we live.

At this moment in time there are two actions our elected officials should take in order to fulfill their fiduciary responsibilities and carry out the mandates of the town plan.

One – Join the coalition of local towns to determine the extent of municipal authority in regards to gas drilling.

Two – Do not enact the proposed zoning changes.

Addressing Noise Abatement

Matthew Van Houten
Cochecton, NY

Good Evening to the Planning Board and thanks for sponsoring this open house:

I'd like to address the draft changes being proposed by the Town Board. I know there's a lot of people here tonight so I'll make this as brief as I can but I warn you that the DEC document referred to in the draft changes regarding noise is a 28 page document and I will not be able to speak about everything. You must, as the zoning officials read this document carefully with an attorney so that they can help clarify any language that you are unclear of.

It appears to me that you're okay allowing quarrying facilities to set up shop and hack the upper two thirds off many of the mountains in the area to provide bank run, gravel, sand and topsoil to the well sites.

This does not, in my opinion, reflect a "gas-neutral" position as I've heard stated publicly.

So, what's the hurry?

The draft changes refer to a DEC document entitled "*Assessing and Mitigating Noise Impacts*" as a guide to the language you are contemplating inserting into the current zoning regulations.

Under the "Responsibility" Section:

The environmental analyst, acting as project manager for the review of applications for permits or permit modifications and working in concert with the program specialist, is responsible for ensuring that sound generation and noise emanating from proposed or existing facilities are properly evaluated. For new permits or significantly modified permits, there should be a determination as to the potential for noise impacts, and establishment of the requirements for noise impact assessment to be included in the application for permit. Where the Department is lead agency, the analyst is responsible for making a determination of significance pursuant to SEQR (State Environmental Quality Review) with respect to potential noise impacts and include documentation for such determination.

And further:

Where impacts are to be avoided or reduced through mitigation measures, the analyst, or.....the program specialist, should determine the effectiveness and feasibility of those measures and ensure that the permit conditions contain specific details for such measures. It should also be determined if additional measures to control noise are to be imposed as a condition of permitting. Appropriate permit language for the permit conditions should be developed by the program specialist and the analyst.

The document clearly states that these issues should be clarified, vetted and mitigated as much as possible during the permit process. While this makes good sense to me I think it's unwise and hasty to adopt these changes now. The DEC document will necessitate the planning board to have all the information regarding the levying of fines and other processes in place to enforce scofflaws. If you do not you will be sued by the gas companies or the residents. Pick your poison.

Towns all over the State of New York do this already. Traffic studies, environmental impact studies and various other mechanisms of action are required by many towns before any permit or variance is issued. Setting community standard levels for ambient noise levels is a difficult and lengthy process that will need to occur before these changes can be instituted.

I'm not talking about the report of a semi-automatic rifle used in sporting, or a chainsaw used to clear a lot or remove fallen trees, nor am I referring to a farmer delivering his milk to market. These would be considered transient noise levels. I'm talking about long-term noise levels that have a destructive effect on human tissue.

I'm also concerned about increasing the traffic on the roads by one hundred fold.

Further to that point you will need to determine what "transient" or "temporary" means. Generators, compressors and other machinery used in the extraction, compression and processing of natural gas should not be considered temporary.

The decibel level of sound, while mitigated slightly over distance, cannot be the only method used to measure the effects of sound on quality of life. You must take into consideration the method by which sound amplifies and the impact of the end level noise on all of our health. Noise travels differently depending on environmental conditions: Time of year, Wind, Land Forms and Structures and Temperature and Humidity. Each of these are studied in moderate detail in the DEC document.

Distance is a good beginning point in determining safe ambient sound levels but I would suggest that additional sound mitigation steps, besides setbacks be adopted. The DEC document uses broad language and gives broad powers to the governing body (in this case, the zoning board) to be creative in their assessment of the permittee's plan for sound reduction and mitigation. For example, constructing berms, planting evergreen trees and sometimes

enclosing the whole of the processing or compressing unit within an acoustical shell. I mention this last part because some companies are already doing this as a way of reaching out to the community. It is in the best interest of all people everywhere to act in the fashion of a good neighbor.

Sound is a tricky thing:

6 generators set side by side running at full bore in the middle of a field will have a different impact on the community than 6 generators nestled in a copse of Norway spruces surrounded on all sides by 15 foot berms. Many factors play a significant role in how sound waves travel and dissipate. These are not perfect solutions by any stretch of the imagination but something will need to be done before permits are issued.

Besides the drilling process you will most likely need to address the issues of compression and processing of the natural gas once it has been extracted. These processes will continue for many years to come..

You should plan on hiring an independent sound engineer to rebut any claims made by the gas companies.

This will be expensive and I wonder if we as a town can afford to pay these fees. Particularly since these are up front costs.

This is the minimum that we as residents will expect.

As for the proposed changes to the zoning code I think it would be wise, in my opinion, to find a less partisan and pro gas drilling expert than the one we're paying for now. The town is not served by someone of Mr. Shepstone's ideology. You need to protect the citizens on a long-term basis.

It really is that simple.

It's important to note that the processing and compressing of gas will continue unabated until the last patriotic cubic foot of gas has been sucked out of the ground wrapped in a copy of the constitution and delivered to Rockland County for distribution.

The weakest regulation is the greatest threat to all of us.

Thank you very much.

All Cochection Citizens are Interested Parties

Laurie McFadden
Cochection, NY

My name is Laurie McFadden. My husband, Keith, and I have been residents of Sullivan County for over 21 years, 17 of those as residents of Cochection. We have a little over 36 acres of land and pay taxes in excess of \$10,000 a year.

My statement to the Planning and Town Boards is very basic. It is about fairness, equitability and the town's responsibility to its residents. Simply put, how do the town officials intend to protect the interests – including quality of life and property values – of the majority of its citizens who will neither be engaging in nor benefitting from gas drilling? And of what benefit to those interests is the proposed change to the town's zoning?

I suspect there is neither a clear nor a satisfactory answer to these questions, other than the endlessly repeated “you can't stop it” “it's coming whether you like it or not” I do not doubt the truth of those statements – but I do doubt the reasonableness of moving forward so rapidly with these zoning changes until the fairness, equitability and responsibility questions have been answered.

Two or three years ago I sat in several town and planning board meetings where the proposed establishment of Dog Mountain Lodge was on the agenda. Week after week the owners, Dean and Krista, were asked more questions, and required to provide more guarantees that their business activity would not bother their neighbors. I am astonished that the proposed zoning change and the activity of gas drilling is receiving far less scrutiny and discussion by the Board than a proposed dog kennel.

Mr. Shepstone, who the town has hired to help with the zoning changes is not a neutral player in this arena. He has proclaimed himself to be pro-drilling and anti-moratoria. He is absolutely entitled to his opinions. But we must be careful that his opinions, however heartfelt, are not what drive the changes in the zoning laws that will affect the lives of all Cochection residents for years to come.

Until the town can adequately and fully tell us how they will protect the interests of all residents of Cochection, I implore them to go slowly – to wait until all the science is in; to understand how this activity can be regulated. Do not just hand over our wonderful town to outside multinational gas companies without giving the matter at least the level of scrutiny afforded to a dog kennel.

Political Oversight and Industry Compliance

Robert Berlind
Cochecton, NY

My name is Robert Berlind and I have lived in Cochecton for 25 years, initially part time and since my retirement from teaching, more or less full time.

Any discussion of drilling since the Gulf disaster must include those accidents that can and inevitably do happen. It is estimated that 2 ½ million gallons of crude oil are gushing into the Gulf each day, as though the Exxon Valdez catastrophe were being repeated every 4 days.

“The crude could also make its way into the Atlantic Ocean, lugged along by powerful currents.” We’ve learned from this and the problems already brought on by High Volume Hydro Fracturing that no activity at such a depth below the surface of the earth is simply a local matter.ⁱ

I don’t want to focus on the technological problems of such complicated projects. My purpose in bringing up the Gulf Gush has to do with the issue of political oversight, industrial compliance with regulations, and the complicity between those being regulated and the regulators.

This is from the NY Times, March 14ⁱⁱ:

“Washington—The federal Minerals Management Service gave permission to BP and dozens of other oil companies to drill in the Gulf of Mexico without first getting required permits from another agency that assesses threats to endangered species—and despite strong warnings from that agency about the impact the drilling was likely to have on the gulf. These approvals, federal records show, include one for the well drilled by the Deepwater Horizon rig, which exploded on April 20, killing 11 workers and resulted in thousands of barrels of oil spilling into the gulf each day.

The article goes on to recount that “scientists were regularly pressured by agency officials to change the findings of their internal studies if they predicted that an accident was likely to occur or if wildlife might be harmed...Managers at the agency have routinely overruled staff scientists whose findings highlight the environmental risks of drilling, according to a half-dozen current or former agency scientists...The scientists ...said they had repeatedly had their scientific findings changed to indicate no environmental impact or had their calculation of risks downgraded.”

President Obama has publicly criticized what he called “the cozy relationship between government and the oil industry.”

All levels of government, from the White House to Congress to state governments to town boards, are up against powerful forces when they are dealing with the multi-national oil and gas industries. The state has already made unwise concessions, stripping away local regulatory powers over gas drilling. My point is not to call into question the integrity of all government workers, either at the level of the MMS or the thousands of locally elected or appointed public servants who, I’m sure, strive to serve the public well. But we must recognize that the enormous power of corporations such as British Petroleum or Halliburton or Chesapeake exerts a huge and not democratic influence of our governance, an influence that is endemic and probably unavoidable.

Once the state opens its door for (high volume hydrofracture drilling), we won't be able to trust the terribly understaffed DEC to enforce its regulations. If we deliberately open the town door, too, as the amendment in question does, we run a terrible risk: that we will be helpless to enforce anything. Please don't open that door! Our health, safety, welfare, and the value of our properties depend on it.

Democracy is an ongoing project and we must never take for granted that the interests of most of us are being served when the governmental agencies charged with protecting the environment sit down with the huge corporations whose real concern is their bottom line.

The promises made by the agents of big Gas & Oil, released from such protection as the Clean Air & Water Act, must seem like jackpot lottery tickets to those who have leased. They may, in fact, make losers of us all: lessees and non-lessees alike.

ⁱ NY Times, May 16: The Gulf accident is a much less local issue than we might think according to Kate Galbraith

ⁱⁱ NY Times, May 14:

Lessons from Louisiana

Joe LeDoux
Cochecton, NY

I've been a home owner in Cochecton since 1993, but grew up in South Louisiana, not far from the Gulf of Mexico. Louisiana calls itself the Sportsman's Paradise. People there love to fish, hunt, boat, and vacation in the coastal areas. This way of life is now seriously threatened by the BP disaster. If a problem of this magnitude can occur in an industry like oil, where regulations to protect the environment are in place, I fear what might happen in an industry where environmental regulations have yet to be enacted. To many people, Sullivan County is also a Sportsman's Paradise. But if the water and air are contaminated, Sullivan County will no longer be anyone's paradise. It's not worth the risk to rush into gas drilling before we have a clear picture of the environmental impact.

Lessons of History

Allan Rubin
Cochecton, NY

The current proposed zoning changes before the planning board have confused numerous Cochecton residents. Are they for solidifying the town's limited role in mitigating the expected effects of gas exploration, or are they designed to invite and facilitate that activity? Why now? With all the impending federal, state, county and River Basin regulation changes that are yet to be resolved, this is surely not the time to make any changes that the town may come to regret. It is, however, an advantageous opportunity to openly and candidly discuss, within the town, all the issues surrounding gas drilling so a consensus can begin to evolve.

Natural gas might help power America in the fashion in which it is accustomed to for a few more decades. Yet it is a fossil fuel, the burning of which increases CO₂ in the atmosphere, causing global warming and climate change, the evidence of which we see even in Cochecton with extreme weather and seasonal changes each year. Burning gas may be a little cleaner than coal and oil, but the extraction process of slickwater hydrofracturing makes it potentially harmful to air, water and human health. Gas is finite in quantity with diminishing returns over time. When it is exhausted our society will remain in the same boat as before, still sinking, and with sacrificial communities like Cochecton having been the first to be thrown overboard so the rest of the culture could remain in its gluttonous, fossil fuel addicted malaise. These interim decades will not have brought us closer to development of alternative, sustainable energy sources because we already have that technology and only lack the will to invest in it. Why not? Because coal, oil and natural gas are cheaper. They are cheaper because they are government subsidized and because they are dirty. If coal, oil and natural gas had to be provided without their attendant environmental pollution, they would no longer be cheaper than alternative fuels. That is the catch 22 with gas. If we regulate it and force it to be clean, it will no longer be cheaper. If we chose it, we will have to take it dirty. If the industry can't extract it here with maximum profit, they will go where they can. Shouldn't we jump overboard now from this floundering vessel and swim to shore where there is an abundance of power from wind, sunlight, geothermal, tidal, biomass and conservation savings just waiting for us to enjoy its clean, safe energy bonanza?

The lessons throughout history should be a clear warning. Nuclear power was sold as an abundant energy source that would be clean and too cheap to meter. Three Mile Island, Hanford and Chernobyl changed the game and the boom went bust when radiation leaked. Alaskan oil and offshore drilling were supposed to free us of foreign energy dependence. A drunken ship captain and now impatient BP executives made all the regulation useless when the Exxon Valdez and Deepwater Horizon spilled oil. Union Carbide preferred to build chemical plants where rules were the weakest. Thousands of residents of Bopal, India lost their lives

when the chemicals escaped. Love Canal was a convenient place to dispose of toxic waste and then cash in by building a housing project on top of the dump. Ten years after the incident, New York State Health Department Commissioner David Axelrod stated that Love Canal would long be remembered as a "national symbol of a failure to exercise a sense of concern for future generations. There was a toxic waste dump in Jeffersonville a few years back. It can happen here. Hurricane Katrina was a natural storm, but the poorly constructed levies in New Orleans were no accident. In 1980, 1125 acre Lake Peigneur, in Louisiana was unintentionally drained into a hole drilled by an oil company. None of these involved natural gas, you say? In East Java, Indonesia, since 2006, four villages have been inundated and thirty thousand people displaced by a mud volcano caused by a natural gas drilling accident.

The mud is unstoppable and may continue to spew for decades. We can't expect a mud volcano here but we don't know what will happen when the geologic layers below Cochection are intermingled by explosive hydrofracturing.

Some counter that we take risks all the time. Planes, trains, and automobiles crash but we keep flying, riding, and driving. However, it is a matter of scale of potential catastrophe. When planes carry nuclear bombs, we don't let them fly over cities. When trains transport toxic chemicals we distance them from residential areas. If a car crash could contaminate vast drinking water supplies, we would be more careful where we let them travel. Horizontal drilling with hydrofracking, like deep water oil drilling, is a relatively new, unproven technology and should not be confused with conventional drilling, or with mining and gravel pits.

Until now the authorities of the Town Of Cochection have remained neutral on the issue of whether to welcome or resist natural gas drilling. I urge you to abandon that neutrality and adopt an aggressive anti-drilling position for the protection of the town, its people and its environment. I implore you to seek and to use any power available to you to stop this colonization of our community by multi-national corporations who will suck us dry and spit us out. If you have advice from a professional consultant that the zoning and comprehensive plan ought to be amended to explicitly encourage the invasion of a polluting industry, then you should fire that agent and find one without an apparent conflict of interest.

We don't know what the majority of citizens of Cochection currently feel about this issue. There has not been a referendum. You are our representatives, charged with planning for our future and protecting our welfare. Even if most of us were willing to risk a future with gas drilling, if you were driving a school bus and most of the students were urging you to drive faster down a slippery, winding road toward a cliff, would you step on the gas or pump the brakes? You are the drivers. The future is your responsibility.

Gas drilling is not a natural disaster that you try to mitigate and recover from. This is a potential unnatural catastrophe and it is preventable. You don't try to regulate it to limit the damage, you do everything you can to stop it!

Water

Robin Solvange
Cochecton, NY

My name is Robin Solvang. I own a 10 acre farm in Cochecton with Alpacas and Pygmy goats. My primary residence is Greenwich Village, NYC. My farm has a 3/4 acre pond fed by many underground springs which drain into my neighbor's adjoining Heifer cow and Christmas tree farm.

Water crosses property lines and boundaries. It flows taking the easiest route due to gravity, topography, volume, and the path of least resistance. Water makes its own path. Water changes things where it goes whether eroding a creek bank, smoothing rocks, or pooling. Water does not obey our surface zoning laws and regulations.

An aquifer of underground layers of gravel, sand, or permeable rock that holds ground water can go for miles. Large aquifers run through our town of Cochecton connecting us all. The process of hydraulic fracturing injecting high volumes of water mixed with sand, gels, and 260 types of toxic chemicals at high pressure to break shale rock and release natural gas can contaminate ground water and well water. This happened in Bainbridge, Ohio when gas migrated through underground faults and most recently in Dimock, PA.

The choice is natural gas or water. There are energy alternatives to natural gas. There is no alternative to water. H₂O—Two parts hydrogen and one part oxygen is essential for all life. Our human bodies are 97% water. Gas is a commodity, but so is water. In 15 years 1.8 billion people will live in regions of severe water scarcity (National Geographic: April 2010. Vol.217. No. 4). Women in developing countries walk an average of 3.7 miles to get water while Americans use about 100 gallons of water at home each day.

One out of eight people lack access to clean water. Cochecton residents run the risk of becoming part of that statistic. If we contaminate our aquifers, groundwater, well water, streams, brooks, ponds, rivers, lakes, or creeks with benzene, methane, 2 butox yethanol phosphate or other hydrofracking chemicals then we will pay the price of water filtration, substitution, pumping or water delivery, and our health for generations to come.

There is a spiritual and healing quality of water which cannot be measured in dollars. Water naturally cleanses, calms our souls, and blesses our lives. I was baptized with water. The water did not contain benzene.

Toxic Chemicals and the Lesson of Love Canal

Stacy Burger,
Cochecton, NY

My name is Stacy Burger. I'm originally from the Buffalo-Niagara Region. Best known for chicken wings, the Buffalo Bills, and the majestic Niagara Falls. I graduated from high school with a class of 86 peers. Of those 86 peers, 6 of them have experienced various forms of cancers or other life threatening diseases. That number is HIGH for the amount of students that graduated. The theory behind these high rates of disease lies within the undisclosed toxic chemicals that were leaked or illegally dumped throughout the region. I'm sure we all remember the Love Canal Disaster in Niagara Falls. Just a brief history-between 1942 through 1953 the Hooker Chemical Company dumped 21,800 tons of waste into an abandoned canal in New York. The Board of Education decided to build a school near the disaster despite the warnings of potential health hazards. Houses continued to be built, with the company's reassurance that it had been properly cleaned up. It wasn't until the mid 1970's that strange problems occurring in the area started to really be reported. The early stages included skin irritations. The lingering health issues still prevalent today for people living in the vicinity include high rates of cancers, mental illnesses, miscarriages, birth deformities, and diseases caused by endocrine disruptors. This is what I am here to talk to you about today. I moved to Sullivan County because I knew it would be a beautiful and green place to raise my unborn children. My mom says it's God's Country. Now I am sadly questioning my decision. (1)

Endocrine disruptors are caused from chemicals in our environment. Our highly resilient and adaptable bodies can handle many of these chemicals. But when it starts to be overloaded with them, we start to see the negative side effects. So what does all this have to do with gas drilling?

Toxic chemicals used in the gas drilling process are used in every stage of the drilling process, many of these chemicals questionably not disclosed to the public. An estimated 30-70% of the frac'ing chemicals used will resurface. The gas companies claim that this is retrieved, but have provided no actual studies to confirm their estimate. Besides all the land and water contamination issues revolving around gas drilling, tons of toxic hazardous compounds escape and mix with exhaust from the diesel driven trucks and are released into the air, not to mentioned settling back down into the ground or even leaked. Residents of gas drilling areas have no choice but to breathe these chemicals. Many chemicals used have been recognized as endocrine disruptors. (2)

There is now sufficient evidence to support the hypothesis that these disorders could in part be the result of prenatal exposure to endocrine disrupting chemicals. Your child has a much greater chance of being born with autism, ADHD, learning disabilities, and developing

Parkinson's disease. The list goes on to include juvenile diabetes and cancer, asthma, and autoimmune disorders to name a few. (2)

You may ask, how can this be proven if the companies don't disclose all the chemicals used? Well, the ones they do use have already been determined to have adverse health effects including effects on the endocrine. The percent of products used in natural gas production in Colorado containing endocrine disrupting chemicals: 43%. Chemicals that can cause adverse health effects? 50%. (2)

Gas companies are insisting the drilling process is safe. I am urging you to slow down this process until the EPA can back up their claim of safe drilling. Don't let Cocheton turn into an industrial wasteland.

1.) <http://biology.kenyon.edu/slonc/bio3/2001projects/Superfundkanis/historylovecanal.html>

2.) <http://endocrinedisruption.org/prenatal.disorders.php>

Second Home Market

Joel Cadman,
Cochecton, NY

My name is Joel Cadman. My family and I own a house on New Turnpike B in Cochecton which we purchased in August of 2005. I want to express my profound concern about the Planning Boards' efforts to change local zoning laws to allow gas drilling/hydrofracturing processes in 90% of Cochecton. I think such a move would be a grave error in both short and long-term health issues as well as would have a negative impact on property values in our town.

I feel very strongly that the Planning Board should not move ahead with any such zoning changes, at a minimum, at least until the Environmental Protection Agency releases its current study on the environmental risks of these gas drilling/ hydrofracturing processes, which is due to be released in early 2012.

Ultimately, I think gas drilling should be practiced in more remote areas which don't have residences which pull water from the water table in the ground since there is a risk of contamination with toxins from these processes.

We purchased this second home in Cochecton as a refuge from the noise, pollution and congestion of Manhattan for ourselves and for our two young children, as well as hoping the property would be a long-term investment in a stable, rural environment for our children. As part of this purchase, we pay taxes for services we don't use, particularly for schools in our area. I don't mind helping to support local schools with my tax dollars, even though my family makes no fiscal demands on the Sullivan County school system whatsoever. But gas drilling represents a massive "tax" on my investment in this property in that we would be stripped of the benefits we paid for at the time of purchase, such as clean air and water, peaceful quietness, rolling green spaces without industrial operations grinding away and potentially the poisoning of our property and the neighboring environment. Also, we are already being "taxed" by property devaluation which I expect will only get worse if Cochecton actually proceeds with gas drilling.

Had I known that this region was possibly going to be enveloped by industrial mining operations, I would have definitely looked elsewhere in the state for a second home. I assume that potential buyers such as me will have a similar reaction to owning property that is in the midst of massive, destructive and toxic mining operations.

I've noticed recently on Zillow.com that home prices in the 12726 zip code have had a steep decline since October 2009 (nearly 20%). While foreclosures may be a contributing factor in this decline, I fear that the threat of gas drilling in the area is already depressing property values,

where second home ownership might be reconsidered by potential buyers with goals similar to mine, once they realize that their health and financial investment may be harmed by possible poisoning of well-water, noise pollution from machinery and vehicles and unsightly drilling rigs peppering the landscape. I understand that banks may be more reluctant to give mortgages for properties situated next to land with gas drilling leases.

Arguing against gas drilling could be labeled as N.I.M.B.Y. (Not In My Backyard) syndrome, but the truth is, gas drilling allows massive corporations to take over my backyard, fill the water we draw from it with toxins, subject it (and my family) to air, noise and light pollution, industrial ugliness and a reduction of the value of my property without compensating me one cent. All for the financial benefit of a very limited number of local residents, local residents who themselves may be harmed by toxic water and other forms of pollution as well.

Please do the right thing, and avoid moving toward faster leasing, rather than more cautious and calibrated steps tied to the latest and most detailed possible research on the risks and hidden costs of the "hydrofracturing" and horizontal drilling gas extraction processes. If the board doesn't get this right, we'll all be paying dearly for it with our health, our children's health and our financial futures.

Second Homeowners – Invested in Cochection

Nancy Princenthal
Cochection, NY

A growing number of homeowners in our community are part-time residents, with primary residences elsewhere. Though our jobs tie us to other localities (where we of course are liable for taxes as well), our hearts are in rural Cochection. So is our financial commitment. We pay the same property taxes as full-time residents, and support services vital to this area, from public schools to police departments to social programs, even though we are not able to take advantage of many of them (schools are a primary example). We contract with local builders, suppliers and service people, and support the full spectrum of local businesses. Our contribution does not fit neatly under the heading “tourism,” since our investment is long-term, and our stake in the economic security of our real estate the same as that of full-time residents. If the quality of the water, air and overall environment decline in Cochection as a result of gas drilling, so will the value of that real estate. (Indeed, many indicators show it already has, steeply.) None of us would happily walk away at a loss, and we hope we won’t have to make that decision.

Once Upon a Time

Joan Glase
Rocky Pinciotti
Cochecton, NY

Changing character of Cochecton from rural to industrial

Once upon a time my family and I lived in a city. We worked really hard, but we were tired of the rat race, the stress, the heat, the humidity, the constant noise, the traffic, the polluted air. So we decided to move to where the air was pure, the trees were green and where we could enjoy peace and quiet. We moved to the Newark, NJ waterfront. You know, where the landscape is void of trees, there is always a noxious smell in the air and the view is of gas tanks and unidentifiable industrial structures, and the noise is continuous day and night and it is brightly lit 24 hours a day? Oops, not Newark, it was Cochecton, NY and the year was 2012.

Why do people want to live in Cochecton? Because of the clean air, the pure water, the lack of any noise whatsoever, the lush green hills, the trees, the incredible views. Sure, many of the people who oppose gas drilling weren't born here, they moved here of their own free will – which is all the more reason it is so precious to them. But now Cochecton and its incredible views are threatened. Threatened to become a treeless barren industrial wasteland of gas towers, mud, metal structures, water tank, water pits, dust, trucks everywhere damaging water, air, and soil – and causing harm to the health of humans, wildlife, domestic animals, and vegetation.

This is not an issue of allowing a few people the opportunity to make free money. This is a matter of potentially ruining hundreds of lives. This is such a huge undertaking and nobody, especially the Town Board & Planning Board should just dismiss this with the comment – “There is nothing we can do. Our hands are tied”. The decisions that this planning board makes will have repercussions for decades to come. This is a public health issue and I will not stand by and let anybody put my growing child's health at risk without putting up a fight.

50 houses sit within 1/2 mile of a leased site in my neighborhood in East Cochecton. 50 households who pay annual taxes of over \$200,000. How fair is your zoning going to be to them? Why turn your back on a sure thing for an unknown? How many of those people will either abandon or foreclose on their homes because they cannot sell due to the proximity of a gas well? People WILL leave. People WILL foreclose. People WILL abandon their homes. Is that good for Cochecton? Not only is it an unknown how much money the town can make from gas

drilling – it is entirely up to the gas companies to place the value on the leased land¹ over which the town has no control or over-site. The gas companies will walk all over us.

I support joining in a moratorium until the DEP does its study– not only for the knowledge to be gained, but to allow people the time to leave Cochection with dignity, not be forced out because of health or financial ruin. They WILL leave. I urge Cochection, when and/if home rule is restored, to be gas-free and see how our town blossoms. I urge the planning board to not include any references to gas drilling in our zoning at this time, opening the doors for the gas companies. The gas has been there for millions of years – it can wait.

I read a quote from pro-gas advocate, Mr. Shepstone - who is clearly setting up Cochection to be gas friendly – he said that the gas industry (in PA) will allow the kids to stay in the area, that it is a future for them. I beg to differ.

Let's suppose my son stays here and lives in our present house with his own family – a telephone conversation in twenty years could go like this:

“Hi Mom- well we found out why little Johnny has a brain tumor. It turns out that the cement casings from the local gas well cracked and toxic chemicals have been leaching into our well. We also found high levels of radon and radiation all around the property. Mom – why did we stay here? Why didn't we move when we had a chance? Why didn't you do anything?”

“Don't you remember, son? On the night of your 12th birthday, May 27, 2010, - that was 4 years before your father, who never smoked a cigarette in his life died from lung cancer and 3 years before I got breast cancer – remember? when we had to leave you alone on your birthday for a few hours and at attend the Cochection Planning Board meeting? (yes we left you alone then – that was before the man-camps with were set up and it was still safe in Cochection) Well at the meeting we were told that the town's hands were tied that everything was going to be fine and they wouldn't join in the moratorium. Then when the drilling came we couldn't sell the house. We tried but nobody wanted to move here and the banks wouldn't give out mortgages anyway. So we were forced to stay.”

“No mom, I don't remember – you know my memory isn't good – with my seizures and all.”

“Come on honey - don't you remember the night before your birthday we looked at the stars and you pointed out the constellation Gemini which was visible because it's your sign of the Zodiac?”

“No mom – I don't remember seeing any stars. There were stars then? It's so bright all night from all the gas sites we never see any stars. Little Johnny has never seen a star in his life.”

¹ According to Independent Oil & Gas Association of new York

References:

Dr. Theo Colborn
Rodale Press

Appendix A: Documented Incidents

Documented Incidents Involving High-Volume Hydraulic Fracturing

Date	Place	Nature
July 2009	Lycoming County, PA	Methane gas leak. Streams and private wells contaminated. One resident forced to evacuate.
Jan 2009	Susquehanna County, PA	Methane gas leak. Private wells contaminated. One well "exploded."
Sep 2009	Susquehanna County, PA	Liquid gel spills. Wetland polluted. Fish kill in one creek.
Apr 2009	McKean County, PA	Methane, iron, manganese leaks. Numerous wells as well as sewage treatment plants contaminated.
May 2008	Lycoming County, PA	Gas company failure to obtain water withdrawal permits.
Jun 2006	McKean County, PA	Gas contaminated several residential wells.
Sep 2006	Washington County, PA	Natural gas contaminated several private wells.
Jun 2005	Forest County, PA	Natural gas contaminated two springs that serve as domestic water supplies.
Oct 2008	Monongahela River, PA	Excess TDS (total dissolved solids)
Sep 2007	McKean County, PA	Natural gas leak contaminated community well water and caused minor explosion.
Apr 2009	Jefferson County, PA	Combustible gas in drinking water well.
Jan 2008	McKean County, PA	Gas in domestic drinking water well
Jan 2005	Bradford County, PA	Contamination of two waterways and a wetland.
Dec 2007	Geauga County, OH	Methane, iron, manganese, aluminum and TDS contamination of 45 domestic and 1 public water supplies. Explosion inside residence. No injuries, but significant structural damage.
Sep 2009	Monongalia County, WV	Substantial fish kill in 30 miles of Dunkard Creek.
Apr 2008	Jefferson County, PA	Combustible natural gas found in private residence.

No date	Susquehanna County, PA	Substantial leakage from diesel fuel storage tanks
Nov 2007	Erie County, PA	Explosive levels of gas migration caused residents of Walnut Creek to be evacuated from their homes for over two months.
July 2009	PA	Cease and desist order issued against U.S. Energy Devel. for 302 violations of environment laws.
Dec 2006	PA	Cease and desist order issued for Synd Enterprises and Vertical Resources for “continued and numerous” violations causing gas migration and groundwater contamination.
Dec 2009	Midland, TX	50 times acceptable level of hexavalent chromium found in well. 42 others exceeded safe levels.
Aug 2009	Denton, TX	High concentrations of carcinogenic and neurotoxin compounds found in ambient air. Human illness and animal death reported.
Jan 2009	Dallas County, TX	Pollutant emissions from natural gas drilling activities per day found to surpass those produced by all vehicle traffic in Dallas-Fort Worth region.
Jun 2009	Johnson County, TX	Disposal of gas drilling wastewater linked to earthquakes.
Aug 2009	Fremont County, WY	Contamination by hazardous chemicals of a number of drinking water wells.
Dec 2009	Garfield County, CO	Methane and chloride contamination of ground water connected to drilling and production activities.

Appendix B: Typical Community Noise Levels

Typical Community Noise Levels

Community Description	dB(A)
Rural and Sparsely Populated Areas	35-50
Quiet Suburban Community (Population Density <280 people/kM2 – Remote from Large Cities, Industrial, and Trucking Activities)	50
Normal Suburban Community (Population Density <770 people/kM2 – Not Located Near Industrial Activity)	55
Urban Residential Community (Population Density <2600 people/kM2 – Not Immediately Adjacent to Heavily Traveled Roads and Industrial Areas)	60
Noisy Urban Residential Community (Population Density <7700 people/kM2 – Near Relatively Busy Roads or Industrial Activity)	65
Very Noisy Urban Residential Community (Population Density <26,000 people/kM2)	70

Sound wave propagation is a complex interaction of physical surroundings, geographic terrain, and atmospheric conditions. The variability of all of the possible permutations with varying potential scenarios can at best only predict the average ambient or instantaneous noise level at a given receptor location. It is industry practice to use

mathematical modeling to estimate noise propagation and expected noise decibel levels rather than perform ongoing noise monitoring.

The common measurement of noise is measured and depicted on a logarithmic decibel (dB) scale. The logarithmic function indicates that the noise level will double for every increased measure of 10dB. As a reference to the potential noise levels at a typical natural gas well site utilizing current hydro fracturing techniques, the following table illustrates typical sound types and their corresponding decibel levels:

Typical Common Sound Levels		
Sound Type	dB Level	Health Effects Threshold Notation
Weakest sound heard	0dB	
Quiet living room	20dB	
Whisper Quiet Library	30dB	
Quiet conversation	40dB	
Average office noise	50dB	
Normal conversation (3-5')	60-70dB	
Telephone dial tone	80dB	
City Traffic (inside car)	85dB	
Train whistle at 500', Truck Traffic	90dB	
Subway train at 200'	95dB	
	<i>90 - 95dB</i>	<i>Level at which sustained exposure may result in hearing loss</i>
Power mower at 3'	107dB	
Snowmobile, Motorcycle	100dB	
Power saw at 3'	110dB	
Sandblasting, Loud Rock Concert	115dB	
	<i>125dB</i>	<i>Pain begins</i>
Pneumatic riveter at 4'	125dB	
	<i>140dB</i>	<i>Even short term exposure can cause permanent damage - Loudest recommended exposure <u>WITH</u> hearing protection</i>
Jet engine at 100', Gun Blast	140dB	
	<i>180dB</i>	<i>Death of hearing tissue</i>
	<i>194dB</i>	<i>Loudest sound possible</i>