PUBLIC SCOPING MEETING FOR
SUPPLEMENTAL GENERIC ENVIRONMENTAL IMPACT
STATEMENT ON DEC'S OIL AND GAS REGULATORY
PROGRAM FOR THE MARCELLUS SHALE

HELD ON: November 6th, 2008
HELD AT: Allegany Limestone Central School

DEC APPEARANCES:

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ALJ: Good evening, everyone. My name is Molly McBride and I'm the administrative law judge with the New York State Department of Environmental Conservation, I'll be presiding over this evening's scoping session.

The purpose of this scoping session is to receive public comments on the Draft Supplemental Generic Environmental Impact Statement on the oil/gas and solution mine regulatory program.

Notice of this hearing and five additional hearings that will be held throughout New York State have been published in both newspapers throughout New York State and the DEC's electronic Environmental Notice Bulletin, it's an electronic publication on the DEC's website which is accessible by the public.

The purpose of this public scoping session is to receive unworn statements from the public. The comments received here tonight will form a part of the record. Like I say, there will be five
additional hearings held throughout the state, tonight is the first of six hearings.

It is not a question and answer session, but an opportunity for the public to make their comments on the record. If you do not wish to make a comment here this evening, you may also submit a comment in writing to the Department. After I get some brief opening comments here, representatives from the Division of Mineral Resources will give further information on how to make written comments regarding this program.

If you do wish to speak here this evening, you need to fill out a speaker card. Speaker cards are right outside the room, there at the table. Fill out a card and give it to one of our Department representatives who will bring it down here and we're going to call everyone who fills out a card here tonight and give them an opportunity to be heard.

I will call your name when it's your
turn to speak. I think for purposes of making sure that everyone can hear you, I will have all speakers come down to the podium, which is to my left, it has the DEC logo on it.

Do you see that young woman sitting there at the table, that is our court reporter for this evening. She is going to be making a record of everything that is said here. When you do make your comments I would ask that you please speak slowly so that she can make an accurate record. We want to make sure that everyone's comments here are accurately recorded.

Please also show respect for the person that is speaking, even if you disagree with their comments. If you would hold any applause until the person has finished speaking, again so that we do have an accurate record of this hearing here this evening.

Before I do begin receiving public comments, I'm going to introduce Bradley Field who is the director of the
Department's Division of Mineral Resources who will introduce some other speakers here this evening.

MR. FIELD: Thank you, Judge McBride. Welcome everyone to this evening's first public scoping meeting. Before we get started we have a brief presentation that we will go through here on the PowerPoint up on the screen, but before we do that, I would just like to introduce you to some of the people for information and receive your comments. First off I would like to introduce Deputy Commissioner for Radiation and Materials Management, Val Washington. Also with us here tonight is Assistant Director for the Division of Mineral Resources, John Arman. Director of the Bureau of Oil and Gas Regulation, Jack Dahl. Also we have Carrie Friello who works in the Bureau of Oil and Gas Regulation. And last, but not least, your presenter this evening who will go through the PowerPoint for you is Kathy Sanford, who is chief of our permit section. She
will get started here in a moment. So thanks for coming out everyone, we look forward to hearing from you.

MS. SANFORD: Thank you, Brad, Judge McBride. If we could have the lights now. Thank you.

Good evening and thank you for being here tonight to give us your input on how DEC should regulate shale gas wells.

As already has been mentioned, most of our time here tonight will be spent on hearing your comments, but first I'm going to tell you a little bit more about how this works.

This is a public scoping meeting and the subject of the meeting is the draft scope Supplemental Generic Environmental Impact Statement on DEC's oil and gas regulatory program.

I will explain what a Generic Environmental Impact Statement is and then I'm going to tell you about an existing Generic Environmental Impact Statement on oil and gas well drilling.
After that I will explain why the
department is preparing a supplement and I
will explain the purpose of scoping.
Finally, I will talk a little bit about the
draft scope that was released in early
October. Many of you have already read it
and we do have copies available here
tonight.

A Generic Environmental Impact
Statement is a way to evaluate separate
actions that have common potential effects
on the environment. Most of the potential
impacts of drilling an oil or gas well are
the same from well to well. This is true
no matter where or how deep the well is
drilled or whether it's drilled
horizontally or vertically.

An individual impact statement is not
necessary unless a specific project has
unique or non-generic characteristics. DEC
completed a Generic Statement on gas/oil
drilling in New York in 1992. It's on
DEC's website at
www.dec.ny.gov/energy/45912.html.
Even with a Generic Statement in place, DEC reviews each drilling application individually. We look at the location and the proposed methods. We determine on a site-specific basis what permit conditions are necessary to protect the environment. If everything is consistent with the Generic Statement, then there will not be significant environmental impacts.

We may find that another DEC permit is needed for the project, such as stream or wetland disturbance. If this is the case, then we must consider that, before we can determine the significance of any potential impacts. Further review is required for any well proposed in state parkland, and, likewise, if the activity will disturb more than two and a half acres in an agricultural district. DEC must further evaluate any proposal to drill within 2,000 feet of a municipal water supply well.

There are other circumstances that
could arise which require additional review. For example, the 1992 Generic Statement does not address drilling near underground water supply tunnels. On the other hand, the generic statement does cover drilling in watersheds and aquifer.

Many, but not all, aspects of shale well development are covered by the existing Generic Statement. Many of the effects will be the same from well to well no matter where the well is drilled. For these reasons, DEC will prepare a Supplemental Generic Environmental Impact Statement to address the new potential common impacts. I will refer to that tonight as the supplement. Most of the new potential impacts relate to the large fluid volumes that will be used for high-volume hydraulic fracturing.

We have reviewed the use of the Generic Environmental Impact Statement and the need for a supplement. So now I will talk about the reason we are here tonight. This is a scoping meeting. Scoping is how
we determine the topics that will be included in the supplement. DEC has scheduled six meetings like this across the Southern Tier and Catskills. At these meetings DEC is receiving comments from the public. You may also submit written comments later and I will say more about that. We will consider your comments before we finalize the table of contents for the supplement.

The first objective of scoping is to identify the potential environmental impacts of the activity. The activity that we are reviewing now is high-volume hydraulic fracturing. DEC has identified some potential impacts. One example is the visual effect of larger well sites. Another is the noise from fluid pumping. Large water withdrawals can have various effects. There are more listed in the draft scope.

A second objective is to identify any concerns that are insignificant or irrelevant, those can be left out of the
Third, scoping will help us identify what additional information DEC needs to complete the supplement. One example that is mentioned in the scope is the results of radioactivity testing of the Marcellus Shale currently underway. Another is information about the composition of the additives in hydraulic fracturing fluid.

The fourth objective is to identify ways to minimize impacts. This includes any available alternatives to the proposed activity.

Finally, scoping is the way that DEC gets your input on these topics. That's why we are here tonight.

The scope is like an outline or table of contents for the supplement. DEC prepared the draft scope so that you could comment on our ideas. We included background information so that you could learn about gas well drilling and how the DEC regulates it. We have copies here. If we run out tonight, we can send you one if
you give us your mailing address. And it's also on DEC's website at www.dec.ny.gov/energy/47554.html.

So that brings us again to the purpose of tonight's meeting. We are here to take your comments on DEC's draft scope. Your input will help DEC prepare a final scope. The scope will serve as the outline or table of contents for the supplemental Generic Environmental Impact Statement. Now I will briefly describe the key points in the draft scope.

High-volume hydraulic fracturing is not adequately covered by the existing generic statement. The supplement will generically address the common impacts of this activity. Nevertheless, we will continue to review each proposed well individually.

One well at a time, DEC will determine consistency, or lack thereof, with the Generic Statement and the supplement.

One well at a time, DEC will identify
unique concerns that require other permits or changes to the proposed activity.

Last but not least, DEC will make sure that every single permit includes the necessary requirements to protect the environment.

One activity not addressed by the existing generic statement is the taking of water from surface water bodies. This could potentially affect stream flow. Taking too much water at the wrong time could reduce how much is available for public supply. DEC must consider the water needs of fish and wildlife. We will evaluate all of these concerns in the supplement.

The draft scope discusses how hydraulic fracturing has been managed under the existing GEIS. DEC will use the supplement to evaluate unique issues related to shale gas development. An example is high-volume fluid storage at the well site. Another is transportation of the fluid to and from the site. Others are
the available options for fluid reuse, treatment and disposal. I encourage you to look at the draft scope for a more complete list of the topics DEC is reviewing.

The activities and facilities I just described could affect the environment in several ways. These are explained in Section 4 of the draft scope. Without appropriate controls, the activity could affect water resources. Noise and visual effects will occur. They may be potential air quality impacts. Trucks will haul water on local roads. The supplement will also discuss cumulative impacts, impacts to communities and environmental justice concerns. We expect that you will have many comments on potential impacts tonight. Your input will help us refine the scope before we make it final.

The supplement will answer these questions about high-volume hydraulic fracturing: What are the potential impacts and how can they be minimized or avoided? When will the Generic Statement and the
supplement together adequately support issuance of a well drilling permit? When will DEC require a site-specific supplement?

DEC expects to release a final scope in early 2009. This will be followed by a draft supplement in spring 2009. We will publish a notice when the draft is ready and there will be an opportunity for public comment on the draft supplement.

DEC hopes to finalize the supplement by summer of 2009 and then at least 10 days after the supplement is finalized, DEC issues findings. These findings will guide DEC's environmental review of individual well permits from that point forward.

DEC is here tonight to encourage public participation. You may provide verbal or written comments on the draft scope tonight or at one of the other scheduled meetings. You may submit written comments until December 15th. And you will also have a chance to review and comment on the draft supplement next spring.
Please include your name and return address when you submit written comments. This will help us let you know when the final scope is ready and then when the draft supplement is ready. If you do not have your written comments ready tonight, you may e-mail them to us at dmnog@gw.dec.state.ny.us. Please use scope comments as the subject heading. Send the e-mail before the end of the business day on December 15th.

You may also mail your comments. We need your mail to arrive in our building by the end of the business day on December 15th. And the address is up there, send them to the attention of scope comments. Send it to the Bureau of Oil & Gas Regulation in the NYSDEC Division of Mineral Resources. That's at 625 Broadway, Third Floor, Albany, New York, 12233-6500.

Thank you for your attention and I look forward to hearing your comments. So I will turn it back over to Judge McBride.

ALJ: Again those addresses for both
the e-mail and for sending written comments
by mail are available in the hallway,
correct, Kathy?

MS. SANFORD: Yes.

ALJ: So they are on the table there
and people from the Department can also
give you both the e-mail address and the
mailing address if you want to submit
written comments and you didn't get that
until just now in the presentation.

I will now start calling our speakers
in the order that the cards were submitted
to me. And again, I would just ask that
you come up here to the podium at my left
and state your full name for the record.
And if you are representing a group, please
identify the group that you are
representing so we know who that is please.
And our first speaker is Stanley Scobie.

PUBLIC SPEAKER: Good evening. My
name is Stanley Scobie. I'm representing a
group called New Yorkers for Sustainable
Energy Statewide that is concerned with the
health, environmental, social and
socio-economic impacts of gas drilling and production. And I brought my water.

As a resident of Broome County, I'm here today because I became very aware of some of the unique aspects of Allegany County this summer when I began working on the Whitesville oil/gas variance hearing.

Allegany and some of the other western counties have three unique aspects regarding gas drilling in unconventional formations like the Marcellus.

First, although Western New York was prominent in energy development in the early part of the 20th century, the gas rush excitement that has been in many of the eastern counties for the past nine months or so has not been felt much here. Thus, probably most citizens don't know much about the implications of this development, even though the Marcellus is a broad-sheet or blanket formation that underlies much of the Southern Tier.

Second, the formation is thinner here than in the east and likely to be somewhat
less productive. Thus, development here will come later, well after most of the drilling controls and regulations are firmly established. It will be difficult for many people to comment effectively at hearings such as these without the background that comes from relatively long and concentrated exposure to specific gas drilling development issues.

Third, and most unique to Western New York counties is the double whammy of having a substantial but unknown number of undocumented and unplugged wells and the fact that a considerable number of landowners do not own their mineral rights. This means that some landowners are not afforded the option of at least some control of whether or not drilling takes place near them by means of leasing or not. They can't build any protections into their leases, as many of us can, because they don't control the right to lease.

And finally, if and when drilling does occur, they have to bear whatever
burdens of the disruption of industrial development brings without any of the compensatory benefits such as leasing bonuses and royalty payments that might allow them substantial mitigation.

Now I want to discuss five issues about the draft scope. The first four are general to the entire state, the last will expand to unique features of the Western New York Region.

Number one, throughout the draft scope there is reference to experience in New York. For example, in Section 4.1.2, reference is made to using pictures of New York sites with regard to appearance. This makes no sense as there is not any sort of representative set of Marcellus-like horizontal wells in New York. Probably the only comparable mature model would be in the Barnett Shale in Texas, the use of New York pictures would just not be useful.

Also, the draft scope makes reference to experience with hydrofracturing in New York. And again, there is no set of
hydrofractured horizontal Marcellus wells from which to draw any sort of experiential lessons. The vast majority of hydrofractured New York wells are small and relatively shallow wells that are in no way comparable. The much smaller number of existing large hydrofractured horizontal wells are not configured in the multiple horizontal manner envisioned in the 2008 amendments to gas and oil law.

These newer Marcellus wells will be -- I'm sorry units for Marcellus wells will be about a mile square, they'll have one or just a few five-acre well pads with a large number of horizontal wells coming from each pad in the so-called zipper configuration. These multi wells can be drilled over a three-year period, hardly a weeks instead of years temporary disruption and inconvenience, more like years instead of weeks.

It is entirely appropriate to use data and experience from other states that are roughly comparable to what development
will be in New York. There is no reasonable basis for relying much at all on New York experience, it would be like comparing apples to bananas. Both are a food and a fruit, that's about it.

Number two, in the draft scope there is occasional mention of health issues and occasional mention of coordination with other agencies. Under NY 617.7, creation of a hazard to human health is listed as a criterion for determining environmental impact significance. There is ample evidence that industrial processes like gas drilling and production are threats to human health. However, with regard, for example, to potable/drinkable water, although it occasionally speaks about water testing, the DEC does not have a suggested water testing protocol on its website. Certainly a substantial health-related concern is contamination of drinking water, surface or subsurface, by one or more of the gas development procedures. The Department of Health does have a fairly
extensive water testing protocol posted. One would think that because perhaps
the greatest overall concern with Marcellus and similar development is human health, that the DOH should be a co-lead agency or at least its participation in scoping and supplemental GEIS development should be far clearer and much more specific. And, again, the New York experience is not particularly relevant regarding health issues because New York has not had the large-scale extraction experience that is envisioned, and that has an experiential base in other states, for example the Barnett Shale in Texas.

Because of the relatively large number of anecdotally-reported drinking water and health-related incidents in other states where large-scale gas drilling is more mature and thus more appropriate as models, we suggest that a special task force be constructed to evaluate, using the best science possible, the likely health impact of natural gas development in New
York. As far as we're aware there is no

good science that proves gas drilling poses
no threat. Therefore, following the
precautionary principle of first try to do
no harm, and using the clear knowledge that
this is an industry that uses some very
health-damaging chemicals in settings
outside the fairly well-controlled
industrial settings that most of us are
familiar with, an unconflicted, blue-ribbon
panel of experts should be assembled to
consult and recommend on health matters for
the supplement GEIS.

Number three, the dismissal of the
participation of the public service
commission in the GEIS process is
inappropriate. What is unacceptable is
that the DEC refuses to assess the impact
of gathering lines, transmission lines, and
accidental spills or releases as part of
the EIS process. This appears to be
segmentation of an inherently integral
process.

DEC's reasoning is that there will be
no PSC involvement regarding gathering lines until after a well is drilled and thus no involvement with EIS issues prior to issuing a permit for a particular well, this is backwards. There will be no wells without gathering transmission lines. One of the first things that oil and gas companies do is to arrange right-of-ways in their leases prior to drilling so that when they drill they can market the gas.

We know that the Marcellus is a sheet/blanket formation and its success is about 98 percent. Probably the DEC's position on excluding the PSC and gathering lines from the GEIS is a historical legacy that was somewhat appropriate for the types of wells drilled in the 1980s and 1990s that had much lower probabilities of success, but it is not appropriate now.

Number four, private potable water wells. The scope should revisit the subject of gas well setbacks from private water wells for four reasons: First reason, no coherent reasoning was ever
presented in the 1992 GEIS for wanting a 2,000 foot setback from municipal water wells and specifying a minimum setback from private wells of only 150 feet. The language in the 1992 GEIS, such as extremely unlikely and most common, was short term problems does not inspire confidence in individual homeowners who have only one well. The issue must be reexamined in light of the use of much larger volumes of hydrofracking fluids with a wide variety of chemicals, some of which may well be synthetic, ones unanticipated in 1992, and many of which are known to be dangerous to human health.

Second on wells, the setbacks suggested in 1992 were examined relative to 40-acre well spacing. The 2008 amendments to Environmental Conservation Law allows units as large as 640 acres, with multiple horizontal wells that can be drilled over a three-year period from a few pads within the unit. It is unclear what the implications of these very different
configurations and the semi-continuous drilling over a long period of time may have.

There is anticipated a very large number of Marcellus wells, 2,000 to 3,000 per county may be likely, assuming 25 percent of the total land is filled with wells at 16 per 640 acre density, because of the wide-area sheet configuration of the formation of the high predicted hit rate. The large number of wells means that even with very small probabilities of damage to private water wells, and the term is used unlikely, there will almost certainly be some meaningful number of water wells damaged. Current regulations and procedures require private owners to pursue damage claims versus having a presumption of causation by the gas drilling. This all imposes an unreasonable burden.

Third point, again, the scope absolutely should not limit itself to data from the New York experience. New York has little experience with this kind of
drilling and there are numerous examples of potable water problems in a number of other states using horizontal hydrofracturing. Thus, the 1992 GEIS suggested there were problems, although rare, and the experiences in other states support the idea that there can be problems. With much larger and more wells, the number of problems will increase considerably.

Fourth point, the massive horizontal drilling and hydrofracturing of these unconventional formations use much larger fluid volumes and there are much larger amounts of produced fluid than was ever envisioned in the 1992 GEIS. Thus, simple probabilistic analysis of the almost certain accidental spills resulting in loss or control of these fluids implies strongly that there will be more opportunities for surface and groundwater contamination. This, coupled with the large number of Marcellus wells virtually insures a meaningful number of serious challenges to private water wells.
Therefore, the setback provisions for private wells should be no different than for municipal wells. Moreover, the setback provisions for private wells should be no different than for municipal wells. Moreover, the setbacks and other protective provisions for both should be revisited.

My last point is special regional circumstances. There is clear acknowledgement of the special aspects of the New York City watershed in the Delaware River area. However, there are likely to be special smaller region issues, ones that potentially affect far fewer people and likely rural populations.

The one that I wish to quickly review here is the issue of old undocumented and unplugged inactive wells. These exist in western counties of New York. They are typically old non-productive wells where, for example, the steel casing was pulled for salvage. There has been oil and gas drilling in Western New York for many decades prior to modern regulatory
practice.

The issue is that with potentially large numbers of Marcellus wells using massive amounts of fluid, the likelihood that a hydrofracture job would communicate with an unplugged abandoned well, make a U-turn, and come back up with water-bearing strata and cause serious and possible widespread water well contamination becomes fairly high.

The double whammy that I spoke about earlier represents a particularly nasty problem for the landowners who do not control their mineral rights, and who probably bought their land under very different circumstances than we now face. I assume that many bought with the good faith assurances that gas and oil development was just about over for this area, as it seemed until quite recently. It imposes an undue burden to expect them now to live with the consequences that could not be foreseen as little as three years ago by both the DEC and by the
New York State legislature when it passed the 2005 amendments to Environmental Conservation Law. Dealing with this problem will be difficult but necessary. The scope must include it. Thank you.

ALJ: Thank you. Our next speaker is Mike Hogan.

PUBLIC SPEAKER: Good evening, I'm Mike Hogan. I'm an energy consultant for the Upstream Oil and Gas Industry. I was born and raised in Olean, New York, so I'm familiar with this area, although I reside now in Chautauqua County. I'm here tonight representing the Independent Oil & Gas Association, also known as IOGA. I'm also a member of the Society for Petroleum Engineers, the Association of Energy Engineers and the Independent Petroleum Association of America.

IOGA of New York has reviewed the DEC's existing GEIS and draft scoping document on a point-by-point basis. The review was an effort to determine if IOGA of New York concurs with the proposed draft
scope and to identify any areas where IOGA of New York's analysis may differ from that of the DEC.

Through this process, IOGA of New York has determined that the overall scope proposed by the DEC appears to be justified based on the potential development of low permeability gas reservoirs in the state, especially the Marcellus formation.

Although our review did identify some points that IOGA of New York believes that the DEC should further consider as part of the scoping process of drafting a supplemental document, our analysis is very much in support of DEC's scope of the proposed supplemental GEIS.

IOGA of New York supports the DEC determination not to reopen the entire 1992 GEIS. IOGA further supports DEC's determination to exclude pipeline regulations from the document. Additionally, since foam water fracturing was covered in the GEIS, DEC has determined the SGEIS will focus on slick water...
fracturing.

IOGA fully supports -- or fully concurs and appreciates the recognition that there has not been any groundwater contamination caused by hydraulic fracturing of gas well development in New York State, despite the use of this technology on thousands of wells during the past 50 or so years.

Well site operations, there are no potential environmental impacts associated with horizontal drilling in itself and they have already been addressed sufficiently in the existing documents and mitigated.

Information about fracturing fluid additives are now being collected from service companies and chemical suppliers, this is now part of the permit application. Fluid handling will be fully addressed in each permit and there is no additional generic controls required.

Examination of water whether PIP, water specifications should be required for high-volume hydraulic flowback operations
should be addressed by a case-by-case, permit-by-permit basis.

Assessment of whether steel tanks should be required on some or all areas containing flowback fluids from high-volume hydraulic fracturing operations is also something that should be addressed on a permit-by-permit basis.

The use of single well pad and drilling multiple wells at a single surface location will reduce the environmental impacts, so further evaluation beyond the GEIS is not needed.

Whether larger lined pits will be used for temporary storage of fluids associated with high-volume hydraulic fracturing operations is a matter to be determined on a permit-by-permit basis.

Water withdrawal, the SRBC, Susquehanna River Basin Commission and the DRBC, Delaware River Basin Commission addresses surface water withdrawals for most of the areas where anticipate that Marcellus drilling will be anticipated and
they will respectively address the potential cumulative impact of numerous withdrawals and no further review is needed.

The aspects of the GEIS scoping document related to water withdrawal, therefore is over -- accordingly overboard and is not necessary.

Community character, hydraulic fracturing of Marcellus Shale wells will not change the GEIS assessment that community character will not be impacted except by environmental -- economic benefits associated with the industry and the employment opportunities provided by the corporations involved and associated service development.

By example, the development of the Barnett Shale in the Dallas/Fort Worth, Texas area has provided 70,000 new jobs in a five-county core area. The core area of the Marcellus Shale has been estimated to be seven to ten times larger than the Barnett.
Development of reservoirs from the Marcellus and other unconventional shale reservoirs will have a significant positive impact upon local communities. Thank you.

ALJ: Thank you. Our next speaker is William Dibble.

PUBLIC SPEAKER: Thank you. One of the big concerns that I've got is the impact, economic impact that it has on Allegany County, the Southern Tier and New York State. We're holding up a process that is quite severe. For example, I will leave this map with you, Molly, this is a county map and there is active leasing going on in the southern part on these 10 columns across the border, two bottom tiers in the county.

I looked at the acreage on this thing and this came in during the leasing, it would have brought in $103 million this year to the taxpayers in the county, that would have been taxed by the state, too bad it's lost, hopefully it will come back soon. You know, that $103 million means a
lot to a poor county like Allegany County.

I also wanted to mention a little bit about the shallow oil field, the old oil field in this area. There was a resolution back in January asking about the state, I will leave a copy here, Resolution Number 25-08, January 25th, I will leave a copy with you. We did another resolution, 25-08, October 27th, this has to do with the shallow wells in this area, especially the Independence thing. And I recommend that you make a permanent change to the regulations according to the resolve in that resolution.

We're asking right now for a variance, but I think as this goes forward we should have a permit changed to the regulations, so hopefully DEC will grant this variance soon, because you have a company that has $150 million to invest over in the Independence/Willing area, that's lost. They are going to go to Pennsylvania, we are losing business in New York State unfortunately.
This resolution that I mentioned to you talks about drilling wells and suggests to you that if you do away with the spacing requirements, any oil wells drilled above the Tully formation, also any gas to oil production ratio is done away with completely. Any laws -- above the Tully and there's a -- chart attached to this, the formation that I'm talking about is above the Tully. Tully is a limestone caprock, it's above the Marcellus formation.

And if this resolution as it states is not what you like as far as wording, because we referred to the formations, you might consider drilling oil wells 42 degrees, 50 minutes, 35.79 seconds in the County of Steuben, Allegany, Cattaraugus, Chautauqua whose total depth above the Tully, not have an oil production, gas/oil ratio requirement.

In addition, beginning oil spacing requirements with such fields, setbacks are maintained at least 80 feet from the lease
boundary, unless it continues, mineral owners/operators are the same.

If the mineral owners are the same parties, there will be no oil well lease setback.

Right at the present time mineral right owners are losing 45 million in the Town of Independence, over 20 years we're losing $80 million of production. So hopefully we will get the variance through soon, Jack, get this behind us and to change the regulations. I'll leave this here. I'm leaving both Resolutions 25-08 and 25-08 with you.

Just a comment about the Marcellus. There is a chart I will leave with you. You probably all got this stuff. This one shows the layout for Marcellus fields, it sits along the southern part of the county, the gray, from here down to Chautauqua, Lake Erie across to Binghamton. And several years ago there was no surprise there were wells drilled by NYSERDA through the -- West Virginia, they drilled several
Marcellus wells around the area, here in Portville and over at Houghton College and Alfred University and they showed the gas is here. The only one that was really good was Houghton because it was a natural fracture, but now by using hydraulic fractures, we can reach out there and get the gas out, it's here, no question, a thick base of it.

I did the studies on that part, VanTine and they contracted NYSERDA to do the study of the wells that were drilled. I have a degree in petroleum from Pitt and I did study geology study at Alfred University, so the gas is here, let's get busy and get it. So hopefully we will get this through very quickly and make some money for the state to get rid of that deficit and have fun doing it.

ALJ: Thank you.

PUBLIC SPEAKER: Thank you.

ALJ: Our next speaker is Larry Beahan.

PUBLIC SPEAKER: My name is Larry
Beahan, I'm representing the Sierra Club and the Adirondack Mountain Club. I'm the current forestry chair for the Niagara Frontier branch of the Adirondack Mountain Club and I'm the open space chair for the state Sierra Club.

Our two organizations are particularly concerned with the effect of these new deep Marcellus wells on forests and particularly forests in parks. I've seen pictures of these wells say several years -- or a few years after they were put in farmland, and they kind of look like a park, that is a city park. But if you put that kind of a well into Allegany State Park and you use up a mile of forest and in the process you cut miles and miles of road through the forest, you really don't have a forest there anymore. And our parks like the parks in the Catskills, like Letchworth and particularly like nearby Allegany State Park are provided so that our citizens will have a place where they can go and be in a wild natural environment to hunt, fish,
camp, ski, and those parks provide millions of dollars' worth of recreation to us and actually bring it into the surrounding towns and counties, actual hard cash. And they are irreplaceable resources.

Allegany State Park has forest in the middle of it of 350-year old Hemlocks, it's going to take a long time to grow another forest like that.

The supplemental GEIS makes some special provisions for special kinds of places where they are to be particularly careful, for instance, wetlands, watersheds, there is no mention of park lands, there is no mention of forest and of the very special kind of destructive nature of these huge industrial wells. I think that this GEIS, it really needs to go back and look at what can happen to our forest.

Allegany State Park, a hundred years ago, was a moonscape with 200 oil wells in it. We could easily be put back there if we're not very careful with our regulation. Thank you very much.
ALJ: Thank you. Our next speaker is Eddie Grey.

PUBLIC SPEAKER: Good evening, my name is Eddie Grey and I am the director of Regulatory Compliance for Chesapeake Energy Corporation, Eastern Division.

Chesapeake is a leader in exploration and development of domestic unconventional natural gas reserves in this country and strongly focused on the development of the Marcellus Shale.

On a more personal note, I'm a registered and professional engineer licensed in the State of New York as well as Pennsylvania and West Virginia. And in addition to nearly 20 years working in the oil and gas ravine, my past has been very deeply routed in environmental stewardship. I'm actively involved in groups such as Ducks and Trout Unlimited. I also serve on the board of trustees for the Nature Conservancy and am the president of the Morris Creek Watershed Association in West Virginia.
Environmental stewardship has been and continues to be a very key element in my life. With this in mind, I, and we, at Chesapeake have reviewed the DEC's existing GEIS document as well as the draft scoping document on a very thorough basis.

This review was intended as an effort to determine whether or not Chesapeake agrees with the proposed draft scope and to identify any areas where Chesapeake -- where Chesapeake's analysis may differ from that of the DEC.

Additionally, we offer our observations based on our own parallel experience in developing low-permeability gas reservoirs such as the Marcellus shale.

Through our review process, Chesapeake believes that the overall scope proposed by the DEC appears to be justified and reasonable based on the potential development of low-permeability geologic reservoirs within the state such as the Marcellus shale.

Chesapeake would like to commend the
DEC on the draft scope. That being said, we believe the DEC should further consider certain points that's outlined in attached comments that I will provide here this evening.

It should be noted that the supplemental GEIS specifically seeks to review low permeability and horizontally drilled gas reservoirs. However, none currently exist within the State of New York. We strongly urge the DEC to collect such information from similar employees in other states.

Chesapeake is committed to working with the DEC as well as the State of New York to provide necessary information so that this resource can be developed for the benefit of New York State and the citizens with great respect to the environment.

For your convenience we have provided a summarized version of our analysis in hard copy format to be used to assist in proposed scope and supplementing the GEIS until it's finalized. Thank you.
ALJ: Our next speaker is Scott Rotruck.

PUBLIC SPEAKER: Good evening, thanks, your Honor, and thanks to the DEC for the opportunity to be here tonight.

My name is Scott Rotruck, I'm the vice president of corporate development for Chesapeake Energy Corporation, Eastern Division.

Chesapeake is the largest producer of clean burning natural gas in the country and is responsible for more than 150 operating rigs drilling for new reservoirs and production across our 18 state-operating area.

We account for approximately four percent of the natural gas produced in the United States. We're also the largest leaseholder in the Marcellus Shale which stretches from New York to West Virginia, as well as the number one developer of shale gas in America.

In the State of New York alone, we have a million acres under lease which
includes the Marcellus Shale and other prospective formations.

Tonight we will address industries overall and portions of the draft scope. The socio-economic impacts of drilling and the need for this process to proceed as expeditiously as possible.

I will speak first with respect to the socio-economic impacts. With respect to the draft scope, we think that the Department did a very commendable job finding the issues to be evaluated as part of the supplement to the GEIS. In particular, we support the Department's decision to limit the supplemental review to a narrow set of issues and not to reopen the entire GEIS process.

We welcome the opportunity to work with the State of New York in providing a resource scope for the Supplemental Generic Environmental Impact Statement, as well as information in completing the review and supplementation process.

Governor Patterson happily stated
that the review should be done quickly and efficiently so as to ensure timely development of a natural resource locked within low-permeability geological formations and to infuse New York with new jobs and economic prosperity.

Having said that, we believe such development can and must be done in an environmentally responsible way, as has been done in Pennsylvania, which is New York's Marcellus Shale neighbor.

Chesapeake and other explore industries stand ready and willing to join with you to develop the Marcellus Shale resources in New York State. Unfortunately we will not be able to do this until well permits are issued by the New York Department of Environmental Conservation.

To do so will require your support to process the supplement to the GEIS as expeditiously as possible and allow this clean-burning resource to be selectively developed. That is the obstacle that we face together, to develop a full economic
potential of natural gas in the State of New York and realize the extraordinary economic benefit and job creation from that effort.

While we understand and appreciate and agree with the necessary attention paid to the environmental aspects of natural gas exploration, we also believe we must address the need to see this process proceed in a timely and expeditious manner so that the State of New York does not miss out on an incredible amount of capital investment, state and local revenues and significant job creation.

Created in 1992, the existing GEIS actively describes drilling activities including hydrofracking and its assessment of potential environmental impacts and its discussion of appropriate mitigation.

In short, thousands of wells have been drilled and fracked under the guidance of the existing GEIS without environmental incident. A recent study by Navigant, an independent engineering and consultant
firm, shows that the shale place, such as the Marcellus Shale, are prolific enough to significantly reduce our country's reliance on foreign oil to reduce home heating prices and to reduce pollution caused by automobiles by up to 50 percent.

During this time of great economic uncertainty, companies across the country will be forced to make difficult decisions regarding the placement of their investments, understanding that it must go where it has the best opportunity to earn a positive return.

Together we can develop the Marcellus Shale to the benefit of local communities in New York State and our economically-challenged nation while absolutely protecting our water resources and other environmental resources.

New York is now uniquely positioned to help America and itself reduce its reliance on foreign energy and to stimulate the state's economy at the same time.

As has been done in Pennsylvania, New
Mexico, Texas, Louisiana and Arkansas, we believe that we can work together to address the questions and the concerns regarding the technological capability of our industry and our track record for protecting the rights of the stakeholders and the environment.

Development of the New York Marcellus Shale will provide a potential springboard for economic prosperity for communities across the majority of New York Southern Tier, including thousands of new high-paying jobs with significant fiscal impact to increase tax revenues and providing New Yorkers with producing well royalty income that could amount to millions of dollars each month.

Using the Barnett Shale, a 5,000 square mile, 18 rural and urban county natural gas -- in North Central Texas as a model of future investment. A multitude of companies have combined to create 99,700 new Texas jobs with an annual economic impact alone of $8.2 billion per year.
It should be noted that the Commonwealth of Pennsylvania is taking a proactive, yet responsible, environmental conservative approach towards the development of the Marcellus Shale through balancing environmental concerns with economic opportunity.

We need every level of employment from good traditional blue collar jobs, such as well tenders and drillers to high tech jobs such as seismic analyst, geographic information system analyst and geophysicist. The industry will benefit a multitude of Americans and American industries from American soil. Right now these jobs are waiting to be created in the Southern Tier of New York where economic development is badly needed.

Thank you all very much.

ALJ: Our next speaker is Joe Evans.

PUBLIC SPEAKER: My name is Joe Evans. I live in the Town of Genesee in Allegany County. I'm representing Upper Genesee Chapter of Trout Unlimited in
Two concerns that we have are environmental in nature. One is the concern over water removal from small streams, especially those that may have wild trout in them. One of our members in August observed a truck, obviously one that is not associated with the Marcellus drilling right now, but whatever drilling is going on in Southern Allegany, but they came into a small brook trout stream and had a 5,000 gallon tank, an empty tank on a truck and they filled up from this brook trout stream that has a flow of less than 1 CFS. What that means, I don't know about the size of the pump or the pipes, but if they filled a 5,000 gallon tank in 10 minutes, that would dewater the stream at least for a small period of time.

If we're talking three million gallons per well for the Marcellus Shale drilling, we just don't want them taking water from a small stream, there are nearby larger streams that are probably better
choices. So somewhere in the permitting we should probably limit streams under a certain flow for finding the water because we do know we need the water. Oil and gas drilling are economically important in our area, we have a need for it, we have a need for the water, we just need a control over where the water comes from.

On a similar note, we have a concern for the trash for invasive species from one water to another. For example, in the last 10 or 20 years, New York State now has VHS, a virus that kills many kinds of fish, a flowing disease, a protozoan that kills trout, zebra mussels, non-native mussels that displaces native mussels and didymo, an algae also commonly known as rock-snot which is in the Catskills right now. Any type of moving water from an infected watershed using that water and then depending on how it's released or where it goes, you can spread one of these invasive species to the detriment of that ecosystem.

Again, this can be controlled by some
type of permitting for sterilizing or somehow treating the pumps and pipes of these trucks that are moving the water and we just want to make a comment on that, thanks.

ALJ: Thank you. Our next speaker is Brian Smith.

PUBLIC SPEAKER: Hello, my name is Brian Smith and I'm the Western New York program director for Citizens Campaign For the Environment or CCE. Thank you for the opportunity to comment.

CCE commends the Department for addressing new technology in the creation of the draft scope supplemental GEIS. We also commend the Department for its proactive approach for soliciting public comment and review and for recognizing the increasing interest in drilling in areas not covered by the GEIS.

The proposed drilling in environmentally sensitive and important watersheds including the Susquehanna River Basin, Great Lakes Basin, Delaware River
Basin, New York City's watershed and the Catskills Park will require effective inner-agency cooperation and collaboration.

In that regard we recommend the DEC Division of Mineral Resources engage in work with the Division of Water, as it has promised to do, specifically with the Susquehanna and Delaware River Basins. Protecting these watersheds is essential to public health and the public's right to clean water.

The Division of Mineral Resources draft scope does not recognize the passage of the Great Lakes St. Lawrence River Basin water resources compact which sets limits on water withdrawals, prohibits water reverse outside the Great Lakes Basin and requires the return of water to its storage watershed.

This summation underscores the fact the public and the Great Lakes needs an inner-agency collaboration to protect our water resources.

CCE further recommends that careful
consideration be made when drilling occurs near class A water bodies, 303(d) listed water bodies and aquifers.

The amount of water to be used for high-volume hydraulic fracturing in a previously mentioned watershed is of course the subject of great debate. Regardless of whether or not the effective watershed has regulations guiding water withdrawal and consumptive use, CCE firmly assist the department, make a policy of returning water to its source watershed. This practice will create uniformity across the basin lines and provide a uniform regulation that does not conflict with any of the other major watersheds mentioned.

CCE agrees that the water withdrawal should include impacts that public water supply, potential degradation of the streams, potential impacts to wetlands, fish and wildlife and strong preventive measures to guide against the transfer of invasive species.

In regard to transporting water
outside of the source basin, this should not be the practice nor the policy of the New York State Department of Environmental Conservation.

All steps should be taken to use the water within the watersheds and return to that watershed. Transporting waste water either through a to or from well drilling site should finally result in that water being returned to its source watershed.

On the issue of waste water and fracturing fluid, CCE believes that the Department should implement stringent requirements for treating and returning water to the source watershed.

The Department has solicited comments on fluid handling and removal of the well site. CCE agrees that the pit line specifications should be detailed and believes that steel tanks should be required for drill pads near class A and 303(d) listed water bodies, as well as sole source aquifers.

We commend the Department for
ensuring all waste fluids that are removed before pits are reclaimed. We adamantly disagree with the underground injection control upon treated waste water fluids as this does not address treatment of this contaminated waste and return of the water.

CCE supports the Department's decision to collect the information from operators regarding volume and consumption of the spent fracturing fluid.

CCE advocates the Department also disclose its information to the public. We are opposed to the position that the Department should allow the confidential and proprietary information to keep the Department from publicly disclosing what chemicals they use for hydraulic fracturing. The public has a right to know what is being used in its soil and its water as well as empowering the public proactively protect themselves by testing for these chemicals. We also support feasibility study for requiring reuse and recycling of fracturing flowback fluid.
CCE supports the Department's decision to determine this normal recurring radioactive materials are norm, are contained in cutting, spent fracturing fluids or production of water. We believe the Department should go further and disclose what norms they've found along the well sites and what quantities to allow the public to finally be fully informed.

Furthermore, the CCE believes that the Department should take a more proactive approach in testing around drill sites and recommends regular testing of water and soil for norms and other chemicals associated with the drilling process and disclose these results to the public.

We believe that it would be prudent and good public policy for your New York State to establish a community for water protection fund, funded by the oil and gas drillers. This new fund should be explicitly used to offer the price of land reclamation and ensure that any unforeseen hazards from oil and gas drilling could be
used expediently to remedy this event effectively on behalf of the public. Again, I thank you for your time.

ALJ: Our next speaker is Michael Joy.

PUBLIC SPEAKER: I would like to pass.

ALJ: That was my last card. Was there anyone else out here in the audience that would like to make a comment? If anyone else would like to make a comment before we close the hearing, again, there are cards available outside that hallway, just fill out a card and bring them down to us.

Ross Scott.

PUBLIC SPEAKER: Good evening, folks. I'm a lawyer in Allegany County and I'm also a landowner. And I also don't have my mineral rights. I have a 250-acre farm in the Town of Independence. I would like to make a comment about some experiences that I've had on my own property with oil and gas operations. And I'd like to first
start by rebutting the gentleman who
earlier testified that fracking has never
caued any harm in New York State, that may
be true for that which he is aware of, but
I know that on my own farm, and there's a
stream that crosses it which had nice long
trot about a foot long in it, there was
fracking going on upstream that wound up
putting a foam, it looked like somebody had
dumped a couple hundred gallons of some
dish detergent or something upstream and
all the fish died, and they still haven't
come back. That was some 20 years ago, so
the statement that there's never been any
harm from fracking in New York State is
false. And it was irresponsible of whoever
said it to make that claim.

And that gets down to how these kinds
of things happen. Companies like
Chesapeake may well have professional
eengineers, professional ecologists and
others, and I don't just say that about
Chesapeake, National Fuel and the other big
producers, they often don't have their own
rigs. Maybe Chesapeake does, but companies generally hire drillers to go out, and I can tell you from experience that the drillers themselves could care less about the environment. They do just what they can barely get away with without getting in trouble with their client which is the big company.

And the actual drillers out there will take barrels of biocide, dump it into creeks, leave partially empty barrels on the sides of creeks with the open end at the top, I've seen it on my own property. Complaints have resulted in very little being taken care of. And that's one of the real problems, in my view, is that the companies that are out there doing these big drilling projects kind of distance themselves from the little contractors that actually drill the wells and I think they need, and DEC needs to in its, in looking at the environmental impact of the hydraulic fracturing, look at the contractual relationship and the kind of
oversite that Chesapeakes have over the little companies and sometimes the companies that do the drilling. I don't see anything in the scoping document, and maybe I've missed it, that addressed how the companies that actually do the work will be monitored by the companies that are retaining them.

So that's all I've got to say this afternoon.

ALJ: Thank you. Is there anyone else that would like to make a comment while the record's open? If there is no one else, I would like to thank you on behalf of the Department for coming out and drive safely.
CERTIFICATION

I hereby certify that the proceedings and evidence are contained fully and accurately in the notes taken by me on the above cause and that this is a correct transcript of the same to the best of my ability.

________________________________________
DANIELLE R. GEORGE