

1 **SUPPLEMENTAL GENERIC ENVIRONMENTAL**
2 **IMPACT STATEMENT DRAFT SCOPING MEETING ON**
3 **DEC'S OIL AND GAS REGULATORY PROGRAM FOR**
4 **THE MARCELLUS SHALE**

5
6
7 HELD ON: November 17th, 2008

8 HELD AT: Broome Community College

9
10 DEC APPEARANCES:

11
12 Edward Buhrmaster, ALJ

13 Louis Alexander

14 Kathy Sanford

15 Jack Dahl

16 Carrie Friello

17 John Harmon

18 Ken Lynch

19 Linda Collart

20 Val Washington

21
22 REPORTED BY: Nancy H. Swartz

23

24

1 MR. ALEXANDER: Good evening. My
2 name is Louis Alexander and I'm the
3 Assistant Commissioner for Hearings for the
4 Department of Environmental Conservation.
5 Again, my name is Lou Alexander and I am
6 the Assistant Commissioner for Hearings for
7 the Department of Environmental
8 Conservation. I'd like to welcome you to
9 tonight's meeting and we look forward to
10 hearing your comments. Presiding over
11 today's hearing will be Judge Edward
12 Buhrmaster. At this time I'd like to turn
13 the meeting over to Judge Buhrmaster.

14 ALJ: Thank you very much, Mr.
15 Alexander. Good evening. My name is
16 Edward Buhrmaster, I am an Administrative
17 Law Judge with the New York State
18 Department of Environmental Conservation
19 and I work in the Office of Hearings and
20 Mediation Services of the department. Our
21 office exists separate and apart from the
22 regional offices of programmatic divisions
23 of the department and our functions include
24 conducting hearings and meetings on behalf

1 of the commissioner.

2 This meeting concerns subjects that
3 the Department of Environmental
4 Conservation should include in its
5 Supplemental Generic Environmental Impact
6 Statement on its Oil, Gas and Solution
7 Mining Program. The Impact Statement
8 relates to permits for horizontal drilling
9 and high-volume hydraulic fracturing for
10 natural gas wells in the Marcellus Shale
11 and other low permeability natural gas
12 reservoirs. It will supplement the
13 existing Generic Environmental Impact
14 Statement the DEC prepared in 1992 about
15 its Oil, Gas and Solution Mining Program.

16 This evening's meeting is for the
17 purpose of receiving comments on the DEC's
18 draft outline of the subjects that should
19 be included in the Supplemental Impact
20 Statement. That outline is referred to as
21 the Scope for the Supplemental Impact
22 Statement. And this evening's meeting is
23 known as a public scoping meeting.

24 DEC staff will explain here in more

1 detail the process and plan scheduled for
2 preparing the Supplemental Impact
3 Statement. The Draft Scope was released
4 for public review on October 6th and is
5 available on DEC's website.

6 This evening's meeting is one of
7 several scoping meetings at which the
8 public can comment on the Draft Scope,
9 particularly with regard to identifying any
10 additional information on subjects that
11 should be included in the Impact Statement
12 in identifying any subjects of the Draft
13 Scope that may be irrelevant or
14 non-significant.

15 Following these meetings DEC will
16 prepare a final scope or final outline and
17 then prepare the draft of the Supplemental
18 Impact Statement. Meetings such as this
19 have been held already in Allegheny on
20 November 6th, Bath on November 12th and
21 Elmira on November 13th. After the meeting
22 here this evening, others are scheduled for
23 Oneonta on December 2nd at SUNY Oneonta and
24 at Loch Sheldrake, Sullivan County at the

1 community college on Thursday, December
2 4th.

3 For information, this evening's
4 meeting is being videotaped for later
5 broadcast at itunes.SUNYBROOME.edu. We can
6 give that to you later. You can view the
7 entire meeting in its entirety, hopefully
8 starting early next week I'm informed by
9 officials here at the college.

10 I'm here to facilitate the receipt of
11 public comments which will then be reviewed
12 by DEC staff which will develop the final
13 scoping document for use in this matter.
14 Parts of oral comments will be taken here
15 this evening at our microphone and we have
16 a microphone setup here directly in front
17 of me. DEC is accepting written comments
18 on the Draft Scope through the close of
19 business on December 15th.

20 After the close of the comment period
21 of the Draft Scope, DEC will prepare a
22 final scope or final outline and then
23 prepare the Draft Supplemental Generic
24 Environmental Impact Statement for comment

1 as well.

2 This evening we're taking comments
3 only. If you have any questions of the DEC
4 staff based on the presentation here
5 tonight, you can direct them to the
6 department after tonight's meeting. And to
7 be heard this evening and to offer your
8 comments, all you need to do is complete
9 one of the public hearing registration
10 cards such as the one I'm holding here.
11 Give us your name, address and group or
12 organization you represent if you're not
13 speaking as an individual. As the cards
14 are returned to me I'll be reading the
15 names of speakers off the cards and asking
16 the speakers to step up to this microphone
17 here in front of me to offer your
18 statements. I'll need you to speak loudly,
19 slowly and clearly, as sitting to my left
20 is a court reporter who's creating a
21 stenographic record of the entire meeting
22 for the department's use.

23 Because of the number of people we
24 anticipate will want to speak, at this

1 point I already have 40 speaker's cards
2 returned to me, I would appreciate it if
3 each speaker holds his or her comments to
4 five minutes so we can hear from as many
5 people as possible before the building
6 closes this evening.

7 If you have a written statement, you
8 can summarize it and give us a copy of the
9 full document which will become part of our
10 record as well. As I said, written
11 statements count equally with oral
12 statements. So if you have a written
13 statement, you can summarize it, that will
14 save some time. Give us your entire
15 statement in writing, that will be reviewed
16 as well. If a speaker makes a point that
17 you would make as well but that speaker has
18 spoken earlier, you can simply state your
19 agreement with that prior speaker rather
20 than repeat the point, that will also save
21 some time this evening.

22 Before we start taking comments, DEC
23 staff will explain the subject of the
24 meeting in what scoping is intending to

1 accomplish. At this point I'll recognize
2 John Harmon who is the Assistant Director
3 of the Division of Mineral Resources who
4 will also introduce some of the other DEC
5 staff who are present here this evening.

6 MR. HARMON: Good evening everyone.
7 Thank you for coming tonight. I just
8 wanted to briefly introduce some of the DEC
9 staff who are here with me and with our
10 administrative law judge.

11 First of all, Ken Lynch is our Region
12 Seven director. Val Washington is our
13 Assistant Commissioner for Mediation and
14 Materials Management. Linda Collart is our
15 Regional Minerals Manager for Region Seven
16 and Eight. We have Jack Dahl who is our
17 Bureau of Oil and Gas Regulation Chief. We
18 have Carrie Friello, also from Oil and Gas
19 Regulation. And, finally, I'd like to
20 introduce Kathy Sanford who will provide us
21 a brief PowerPoint explaining again the
22 purpose of this meeting. Thank you.

23 MS. SANFORD: Hi. Apparently there
24 isn't anything we can do with the lights,

1 so hopefully you'll be able to see well
2 enough or I'll be able to speak clearly
3 enough. Good evening and thank you for
4 being here to share your input with us on
5 how the department should regulate shale
6 gas drilling in New York. As Judge
7 Buhrmaster mentioned, we're going to spend
8 most of our time tonight hearing your
9 comments but before we get to that, I'm
10 going to explain in a little bit more
11 detail the process that we're following and
12 how it all fits together.

13 This is a public scoping meeting and
14 the topic is the Draft Scope for a
15 Supplemental Generic Environmental Impact
16 Statement on the department's Oil and Gas
17 Regulatory Program. I will explain what a
18 Generic Environmental Impact Statement is
19 and then I will tell you a little bit about
20 an existing Generic Environmental Impact
21 Statement that covers oil and gas drilling
22 in New York. After that, I will explain
23 why the department is preparing a
24 Supplement and I'll go over the objectives

1 of the public scoping process. Then I will
2 very briefly cover a couple of the key
3 points in the Draft Scope. We do have
4 copies of the Draft Scope here tonight, it
5 was released in early October, many of you
6 have already read it I'm sure.

7 A Generic Environmental Impact
8 Statement is a way to address separate
9 actions that have common potential impacts
10 on the environment. Many of the impacts of
11 drilling an oil and gas well are the same
12 regardless of where the well is drilled,
13 regardless of how deeply it is drilled and
14 regardless of whether it is drilled
15 vertically or horizontally. An individual
16 site-specific Environmental Impact
17 Statement is not necessary unless a
18 proposed project has unique or non-generic
19 characteristics.

20 The Generic Statement that the
21 department prepared in 1992 to cover oil
22 and gas well drilling in New York is posted
23 on our website at
24 www.dec.ny.gov/energy/45912.html. Even

1 with this 1992 Generic Statement in place,
2 the department reviews each application to
3 drill a well individually. We look at the
4 proposed location and we look at the
5 methods that are proposed to be used there
6 and we determine on a site-specific basis
7 what permit conditions are necessary to
8 protect the environment. If everything is
9 consistent with the 1992 Generic Statement,
10 then there will be no significant
11 environmental impact. We may find during
12 our review that other department permits
13 are needed, such as for stream or wetland
14 disturbance. If that is the case, then we
15 must consider those circumstances before
16 determining the environmental significance
17 of the proposed drilling project.

18 Further review beyond the Generic
19 Statement is always required if a well is
20 proposed in a state parkland or if the
21 proposed well site will disturb more than
22 two and a half acres in an agricultural
23 district. Likewise, further review is
24 always necessary for a proposed well within

1 2,000 feet of a municipal water supply
2 well.

3 Those were the findings that were
4 made in 1992. Other circumstances may
5 arise which require further review. For
6 example, the 1992 Generic Statement does
7 not address drilling in the vicinity of
8 underground water supply tunnels. It does,
9 however, cover drilling in watersheds and
10 in aquifers. Many, but not all, of the
11 potential impacts associated with shale gas
12 development are covered by the existing
13 Generic Statement.

14 Most of the impacts will be the same
15 from well to well regardless of where the
16 well is drilled. For these reasons, the
17 department is preparing a Supplement to the
18 Generic Environmental Impact Statement in
19 order to address the new potential common
20 impacts of this activity. I will refer to
21 that document tonight as the "Supplement"
22 and most of those potential new common
23 impacts relate to the high volumes of water
24 that will be used for the hydraulic

1 fracturing process that is required to
2 develop the natural gas resources in the
3 shale.

4 So now that you know a little more
5 about what an environmental Impact
6 Statement is and I've mentioned why the
7 department is preparing a Supplement, we'll
8 talk about what we're doing here tonight.

9 This is a public scoping meeting.
10 Scoping is the way that the department
11 determines what topics will be in the
12 Supplement. As Judge Buhrmaster mentioned,
13 we have scheduled six meetings like this to
14 receive your input on what should be in the
15 Supplement. This is the fourth meeting
16 that we're having. We're accepting both
17 verbal and written comments tonight and
18 we're also accepting written comments
19 through December 15th. I will say a little
20 more about that later. Your comments will
21 be considered before we finalize the table
22 of contents for the Supplement.

23 The first objective of the scoping
24 process is to identify the potential

1 environmental impacts of an activity. The
2 activity that we are reviewing now is
3 high-volume hydraulic fracturing. The
4 department has identified some potential
5 impacts that are listed in the Draft Scope,
6 that are described in the Draft Scope.

7 For example, one of those is the
8 visual effect of potentially larger well
9 pads. Another is the noise associated with
10 fluid pumping. Withdrawal of water from
11 surface water bodies can have several
12 effects. These and more are listed in the
13 Draft Scope.

14 Another purpose of scoping is to
15 identify any concerns that may be
16 insignificant or irrelevant. These
17 concerns would not need to be addressed by
18 the Supplement.

19 A third objective of scoping is to
20 help the department identify what other
21 information we need in order to complete
22 the Supplement. One example of that type
23 of information that is mentioned in the
24 Draft Scope is the result of radioactivity

1 testing of the Marcellus Shale that is
2 currently underway. Another example is the
3 information we are currently collecting
4 regarding the composition of the fracturing
5 additives that are added to the fracturing
6 fluid.

7 A fourth objective of scoping is to
8 identify ways to minimize the potential
9 impacts. That includes review of any
10 alternatives to the proposed activity.

11 And, finally, the purpose of public
12 scoping is to hear from you on all of these
13 topics.

14 The Draft Scope is an outline or
15 table of contents for the Supplement. The
16 department prepared the Draft Scope and
17 made it available for your review so that
18 you could comment on our ideas for what
19 should be in there. We also included some
20 background information so that you could
21 learn a little bit about gas well drilling
22 in New York and how the department has been
23 regulating it.

24 The Draft Scope, as I mentioned, is

1 available here tonight. If we run out,
2 just give one of us your mailing address
3 and we'd be happy to mail one to you or you
4 can download it from our website at
5 www.dec.ny.gov/energy/47554.html.

6 So, again, we are here tonight to
7 receive your comments on the Draft Scope.
8 The Draft Scope is the outline or table of
9 contents for the Supplement and we will
10 consider your comments before we finalize
11 the scope.

12 The action of high-volume hydraulic
13 fracturing is what I mentioned is being
14 reviewed now. High-volume hydraulic
15 fracturing is not adequately addressed by
16 the 1992 Generic Statement. We will use
17 the Supplement to review the new potential
18 common impacts associated with this
19 activity.

20 Even once the Supplement is
21 finalized, the department will continue to
22 review each application to drill
23 individually. One well at a time we will
24 determine consistency or lack thereof with

1 the Generic Statement and the Supplement.
2 One well at a time we will determine
3 whether a proposed well has unique
4 characteristics that require other permits
5 or even changes to the project as proposed
6 in order to protect the environment. And
7 we will ensure, the department will
8 continue to ensure that each and every
9 permit includes the necessary requirements
10 to protect the environment.

11 One of the specific activities
12 associated with high-volume hydraulic
13 fracturing that is not addressed by the
14 1992 Generic Statement, is the withdrawal
15 of large volumes of water from surface
16 water bodies. This could affect stream
17 flow. If too much water is taken at the
18 wrong time, it could affect availability
19 for other needs, including public water
20 supply. The department must also consider
21 the water needs of fish and wildlife. As
22 reflected in the Draft Scope, these topics
23 will all be addressed in the Supplement.

24 The Draft Scope also describes how

1 hydraulic fracturing has been managed under
2 the 1992 Generic Statement. So the
3 Supplement will address the new or unique
4 considerations to shale gas development.

5 One example of these is the large
6 fluid volume storage at the well site.
7 Another is transportation of the water to
8 and from the well site. Others include the
9 available options for fluid reuse,
10 treatment and disposal.

11 I really encourage you to look at the
12 Draft Scope for a more complete description
13 of all the topics the department has
14 identified to be addressed.

15 The activities and the facilities
16 that I've mentioned that are associated
17 with the activity could impact the
18 environment in several ways. These are
19 discussed in Section 4 of the Draft Scope.

20 Without proper controls, water
21 resources could be impacted. There will be
22 noise and visual effects, there may be
23 potential air quality impacts. Trucks will
24 haul water on local roads. The Supplement

1 will address potential community impacts,
2 cumulative impacts and any environmental
3 justice concerns.

4 We expect that you will have many
5 comments tonight on the potential impacts
6 and your comments will help us to refine
7 our discussion of these in the final scope
8 and then in the Supplement.

9 Ultimately, the Supplement will
10 answer these questions about high-volume
11 hydraulic fracturing:

12 What are the potential impacts and
13 how can they be minimized or avoided?

14 When will the Generic Statement and
15 the Supplement together adequately support
16 issuance of a well drilling permit?

17 And when will a further individual
18 site-specific Supplemental Environmental
19 Impact Statement be required?

20 We're taking comments through
21 December 15th and as I've said, we will use
22 those comments to prepare the final scope
23 that we expect to release in January 2009.
24 The next step will be to prepare the Draft

1 Supplement which we hope to have available
2 for your review in the spring of 2009.
3 There will be at least a 30-day comment
4 period on the Draft Supplement, there will
5 be a notice published so you will know when
6 that is available for review. After that
7 public comment period, we will publish the
8 Final Supplemental Generic Environmental
9 Impact Statement. We're hoping to do that
10 in the summer of 2009 and that will be
11 followed with findings. And those findings
12 are what will guide the department's review
13 from that point forward of individual well
14 permit applications.

15 So we're here tonight to hear from
16 you, this is the fourth of sixth public
17 scoping meetings. We're taking verbal and
18 written comments tonight and we are
19 accepting written comments until December
20 15th. You will then have another
21 opportunity to comment when the Draft
22 Supplement is released in the spring.

23 If you don't have your written
24 comments ready to turn in tonight, you can

1 mail them or e-mail them to us. Please
2 include your name and return address so
3 that we can notify you when the final scope
4 is ready and when the final Draft
5 Supplement is ready for review. If you
6 would like to e-mail your comments, please
7 send your e-mail by the end of the business
8 day on December 15th and use "scope
9 comments" as the subject heading. The
10 e-mail address is DMNOG@gw.dec.state.ny.us.
11 If you would rather mail your comments,
12 again, please put them to the attention of
13 "scope comments." We need to receive your
14 mail by the end of the business day on
15 December 15th. Send them to the Bureau of
16 Oil and Gas Regulation, that's in DEC's
17 Division of Mineral Resources, 625
18 Broadway, Third Floor, Albany 12233-6500.
19 This address and e-mail address are on the
20 front page of the Draft Scope.

21 And that's all I had to say. We look
22 forward to hearing your comments, so I'll
23 turn it back over to Judge Buhrmaster.

24 ALJ: Thank you, Ms. Sanford. As I

1 mentioned earlier, all you need to do is
2 complete one of the public registration
3 cards, such as the one I'm holding in front
4 of me. Give that to our staff, give us
5 your name, address, group or organization
6 you represent if you're not speaking as an
7 individual. And, again, as the cards are
8 returned to me, I'll be reading off the
9 names of speakers and you'll be asked to
10 deliver your statements up here at this
11 microphone.

12 Again, as the meeting is being
13 recorded stenographically, I need speakers
14 to speak loudly, slowly and clearly and for
15 the rest of you, I need you to give your
16 undivided attention to the speakers as
17 they're being heard.

18 Again, because of the number of
19 people we anticipate will want to speak,
20 and at this point I have close to 50 cards
21 completed, I need speakers to maintain
22 their comments to no more than five minutes
23 a piece so we can hear from as many people
24 as possible before the building closes

1 tonight. And if you do have written
2 statements, you can summarize them. As was
3 indicated, the written statements count
4 equally with the oral statements, they will
5 become part of our record as well.

6 Initially I'll note that we have some
7 public officials who indicate an interest
8 in speaking. The first speaker I recognize
9 is Barbara Fiala, the Broome County
10 Executive. After that, Mike Kennerknecht,
11 Chief of Staff for New York State
12 Assemblywoman Donna Lupardo has indicated
13 an interest in speaking. Is Barbara Fiala
14 here?

15 SPEAKER: I do have a written
16 statement that I will present too. I want
17 to thank the DEC for this opportunity to
18 discuss the Marcellus Shale and its
19 potential impact on Broome County.

20 The county owns approximately 6,000
21 acres of land, much of which is eligible
22 for gas leasing and has almost 200,000
23 residents, all of whom would be impacted by
24 the development of the gas play. We

1 understand that this is a difficult and
2 full-rising issue for many residents.

3 Broome County officials have hosted
4 numerous meetings with local elected
5 officials and residents. At those meetings
6 we have presented our research into various
7 issues surrounding the gas play. Some
8 people have concluded that our perspective
9 is anti-drilling. Others have concluded
10 that our perspective is too differential to
11 the industry. Actually, we agree with the
12 stated policy of New York State DEC. It is
13 possible to both encourage development of
14 natural gas resources and protect our
15 environment. These are not mutually
16 exclusive goals.

17 DEC has recently prepared a Draft
18 Supplemental Generic Environmental Impact
19 Statement, which along with the original
20 GEIS, discusses many of the environmental
21 issues surrounding development of the
22 Marcellus Shale. In our dual role as
23 landowner and representative of county
24 residents, we have researched many of these

1 issues. Quite frankly, we have used county
2 employees and outside experts to help us
3 navigate these issues.

4 My administration has prepared a
5 written response to the DSGEIS which will
6 be submitted today to DEC. I'm not an
7 engineer and it would take too long to read
8 this response but I would like to highlight
9 several of our recommendations.

10 Many residents of New York City, like
11 us, are understandably worried about
12 drinking water. There are, however, some
13 unique issues attached to the New York
14 State water supply. Broome County is not a
15 part of New York City's watershed. We do
16 not want natural gas drilling to be impeded
17 in Broome County while additional necessary
18 studies are completed. To address this
19 issue, we suggest that DEC require full
20 Environmental Impact Statements for every
21 drill site application within the New York
22 City watershed. This would allow -- also
23 allow the natural gas play to proceed ahead
24 in other areas of Upstate New York.

1 Broome County has unfortunately
2 experienced historical examples of surface
3 contamination. As a result, we have
4 various industrial ground sites and ground
5 field sites and many homes located over a
6 chemical plume. Many individuals and
7 interest groups have lobbied DEC strongly
8 against the use of earth and pits to
9 collect waste products. We share those
10 concerns. We suggest the DEC require
11 closed-loop drilling systems for horizontal
12 wells and that it require that fracing
13 fluids be captured in steel tanks for
14 disposal.

15 We also believe that manufactured
16 secondary containment systems be installed
17 at the bottom of waste tanks as separators
18 at all well sites.

19 DEC needs to update its financial
20 security requirement for plugging and
21 abandoning wells and it should require
22 additional insurance for environmental
23 protection.

24 In conclusion, Broome County

1 Government is committed to economic
2 development. It is one of our priorities.
3 We have tried to create an atmosphere which
4 invites developers to create jobs and
5 attract capital to our region. We believe
6 it is possible to encourage economic
7 development of the natural gas play while
8 still protecting the environment.

9 As stated, we do suggest the DEC make
10 some regulatory revisions. Additionally,
11 DEC and responsible state leaders need to
12 also assure residents and the industry that
13 DEC will have the staff and resources
14 necessary to manage expected development of
15 the Marcellus Shale. We recommend that
16 these revisions be enacted quickly and
17 clearly.

18 Recently the DEC Commissioner
19 testified at the state legislative hearing
20 as follows: "With respect to our
21 timetable, we anticipate issuing a Final
22 Scope in several months and will be working
23 hard through the early part of the next
24 year to produce a Draft SGEIS. Once

1 prepared, it will be distributed for public
2 comment. We are hoping that the SGEIS will
3 be finalized by next spring."

4 We encourage DEC to abide by its own
5 expressed timetable. Thank you again for
6 this opportunity, we look forward to
7 working with you in the future.

8 ALJ: Thank you very much. Next
9 speaker will be Mike Kennerknecht, Chief of
10 Staff for New York State Assemblywoman
11 Donna Lupardo. After him, Tarik Abdelazim,
12 Executive Assistant to the City of
13 Binghamton Mayor will be heard.

14 SPEAKER: My name is Michael
15 Kennerknecht. I am the Chief of Staff for
16 Assemblywoman Donna Lupardo of the 126th
17 Assembly District. Assemblywoman Lupardo
18 asked me to deliver these brief remarks on
19 her behalf. She writes:

20 "Please accept my sincere apologies
21 that I am unable to deliver these remarks
22 myself. I have been called back to Albany
23 to prepare for tomorrow's special session
24 of the state legislature. I would like to

1 thank the Department of Environmental
2 Conservation for their due diligence
3 regarding natural gas production in the
4 Marcellus Shale. I would also like to
5 thank you for conducting a scoping session
6 here in Broome County, a county that will
7 likely see enormous drilling activity once
8 the SGEIS is established and market
9 conditions become favorable again.

10 Having participated in numerous
11 community meetings and the recent New York
12 State Assembly Environmental Conversation
13 Hearing, there are obviously many issues
14 under consideration in the SGEIS. I hope
15 that in the end you will achieve a balanced
16 approach. One that protects the
17 environment taking into account all of the
18 various cumulative impacts of gas
19 production, while acknowledging the obvious
20 economic potential of this activity.

21 The following is a list of items that
22 I believe are especially important as you
23 move the scoping process forward:

24 Making sure that DEC has adequate

1 staffing levels to address permit
2 applications and oversight of drill sites.

3 Undertaking a detailed analysis of
4 short and long-term cumulative impacts such
5 as effects on local and regional air
6 quality, spread of invasive species,
7 wildlife habitat, et cetera.

8 Requiring closed-loop systems that
9 would capture waste products in steel tanks
10 and safely address frac fluid flowback.

11 Exploring the use of alternative or
12 green fracturing fluids.

13 Requiring groundwater testing before,
14 during and after well completion
15 Making sure the waste water treatment
16 infrastructure is in place.

17 Use of control technologies for noise
18 abatement.

19 Bonding of well sites to ensure
20 cleanup.

21 And reducing greenhouse gas emissions
22 from the release of methane and deposited
23 CO₂ during the process of gas extraction
24 and flaring.

1 Finally, I understand that guidance
2 regarding greenhouse gas emissions will be
3 subject to its own separate public review
4 process and will not be included in this
5 Draft Scope. This makes sense if the DEC
6 will be reviewing greenhouse gas emissions
7 for all of the various permits that the
8 department issues.

9 I hope that this review will be
10 conducted in a timely fashion so that
11 whatever avoidance or mitigation strategies
12 may be used for gas production here in the
13 Southern Tier as well.

14 Again, thank you very much for your
15 time."

16 ALJ: Thank you. Tarik Abdelazim is
17 our next speaker. Following him, Adam
18 Flint.

19 SPEAKER: Good evening. Can you give
20 just the one minute warning in case I go
21 too long? I want to respect all the others
22 who have signed up.

23 I'd like to thank the DEC for coming
24 to Broome County tonight and for carrying

1 out this directive by the governor on this.
2 But you know better than all of us that how
3 you conduct this supplemental review will
4 have lasting impacts for decades to come on
5 our state's long-term economic, social and
6 environmental health. It is an awesome
7 responsibility and I want to thank you for
8 assuming it with determination, patience
9 and rigor.

10 These aren't fully prepared notes.
11 You've presented the public with what
12 appears to be overall a very good start
13 with the scope document. However, I want
14 to discuss three key limitations and how
15 they apply across the document specifically
16 with matters related to air quality, water
17 quality and noise pollution. The three
18 kind of overarching limitations are:

19 One. What seems to be an
20 overreliance on the history of drilling
21 here in New York State, which doesn't
22 necessarily seem to be an appropriate
23 comparison.

24 Two. The DEC's reluctance to study

1 cumulative impacts across all aspects of
2 the gas production phases.

3 And then the third thing, which is
4 difficult to address with the scoping
5 document, is the segmentation of the oil
6 and gas industry and all of its impacts.

7 So the document draws heavily on the
8 many decades of successful gas production
9 here in New York. However, at the New York
10 Conference of Mayor's Gas Symposium that
11 was held here in Binghamton earlier this
12 summer, Stu Gruskin, the Executive Deputy
13 Commissioner of DEC stated, and I quote:
14 "This is something completely different."
15 And he pointed to geography and scale as
16 the major different factors. He also
17 explained that the sheer volume and scale
18 will require the agency to rethink its
19 operations, its resource allocation, how it
20 coordinates with other agencies and, of
21 course, the regulations.

22 So rather than referencing our
23 state's earlier experiences with the gas
24 drilling because of some similarities in

1 part, it seemed that we would be better off
2 if we were drawing from other states that
3 had experienced the type of drilling we
4 expect to see here with the Marcellus Shale
5 gas plays. There are plenty of examples,
6 the New Mexico, Wyoming, Colorado, Texas
7 and even Pennsylvania. So if we look at
8 how this applies to a few of the issues of
9 water quality, the document references the
10 agency's very successful record of
11 mitigating adverse affects on our water
12 supply and for that, the agency deserves
13 our appreciation.

14 However, by its own admission, the
15 agency was not aware of the chemicals used
16 in prior fracing of wells. This is perhaps
17 something in order to boosts the public's
18 confidence, perhaps there could be random
19 sampling of water wells in areas that have
20 experienced a lot of activity in the
21 western part of the state, specifically
22 with those chemicals that we now know are
23 used or that the DEC may know are used in
24 the frac fluids.

1 Limited noise in 4.1. The document
2 states: "Gas well production sites are
3 described by the GEIS as very quiet."
4 However, this contradicts exactly the
5 experiences of Fort Worth, Texas which is a
6 far better comparison of the drilling we
7 expect to see here. According to the
8 Broome County Attorney Joe Sluzar who
9 traveled to a "fact finding mission" he
10 reported that municipal officials said the
11 number one complaint from constituents is
12 the noise of compressors that run 24/7
13 after the drilling and throughout the
14 well's production period.

15 So this is a perfect example of why
16 the overreliance on the state's prior
17 experiences is limited and it's an
18 inaccurate basis for determining the items
19 to be included in the supplemental.

20 So as we study and analyze on how
21 best to structure our regulatory approach,
22 it would be a disservice not to draw upon
23 the very relevant experiences from other
24 communities that have experienced this

1 magnitude and type of drilling.

2 Thirdly, air quality. A recent study
3 in Fort Worth showed that all of the wells
4 combined in Fort Worth are producing more
5 greenhouse gas emissions than all of the
6 cars combined in Fort Worth, Texas.
7 Colorado for over the last five years has
8 experienced an increase in smog activity.

9 These are very real, relevant labs
10 that we can turn to so we can establish the
11 best regulatory approach that's going to
12 protect the safety and welfare of our
13 constituents.

14 We really should quantify and
15 estimate the production of methane, sulfur
16 dioxide, nitrogen dioxide, carbon monoxide,
17 volatile organic compounds. We need to
18 understand and quantify the production of
19 ozone, which happens after VOCs and
20 nitrogen dioxides come into contact with
21 direct sunlight.

22 But here's the second point.
23 Measuring this for one well doesn't make
24 much sense which is why we really need to

1 study cumulative impacts. According to
2 1992 it says: "Cumulative review is
3 impractical and unnecessary when
4 considering most oil and gas drilling
5 because" and then it lists a few reasons
6 such as economics, the independent nature
7 of each well and how many will be drilled.

8 That was a defensible statement 16
9 years ago. I was a sophomore in college, I
10 hadn't even heard of electronic mail yet.
11 Cell phones were the size of, like, small
12 toasters. We have incredible technological
13 tools available to us, particularly GIS,
14 geographical information systems. This is
15 a tool that's been revolutionizing the
16 public, private, non-private sectors for
17 years. It is a phenomenal one that we
18 should be using full built-out models. And
19 perhaps in the supplemental, including a
20 certain threshold, that once it is reached,
21 we then might have to trigger a second
22 review and consider again how we're
23 impacting the water and air quality for our
24 area.

1 successfully, particularly when the risks
2 and rewards are as great as they are today.

3 Thank you for a chance to comment.

4 ALJ: Adam Flint followed by Chris
5 Burger.

6 SPEAKER: Thanks very much for this
7 opportunity. I've lived in this community
8 since 1966 and while I'm very active with
9 citizen groups across the state, on this
10 issue I'm speaking for myself today.

11 I understand personally and fully the
12 economic crisis this region has faced for
13 20 years but rushing into gas production on
14 a massive scale, while it may seem like an
15 answer to our economic woes, would be a
16 reckless move.

17 As energy costs increase, we will
18 need to produce more food and more goods
19 locally and, frankly, we can't eat or drink
20 the natural gas that we will produce here.
21 And, unfortunately, it won't lower our
22 heating costs because that's not how these
23 things work.

24 Some of you may claim that we need to

1 rush regulation, that the delays will cost
2 us jobs and money that we can ill afford,
3 but that regulation protects our health,
4 safety and the environment. It does cost
5 money and protecting our health and
6 environment is and should be a cost of
7 doing business here.

8 I also want to take issue with those
9 who point fingers at those who want the
10 responsible approach to this for delaying
11 unneedlessly. Regulators have been aware
12 for more than two years that landmen have
13 been knocking on doors. If this process
14 had been started two, maybe three years
15 ago, we might be sitting here with a lot of
16 you in the audience with much better leases
17 and with this process already in place.

18 I'm happy to hear a recognition by
19 many that the history of drilling in this
20 state is not preparation for what will
21 come. I think it's a little bit like
22 comparing owner-operated fishing fleets of
23 New England to industrial trawlers. Both
24 are fishing, but their operations and

1 impact are very different.

2 And as has already been stated, we
3 need to look at Fort Worth, Texas, Ohio and
4 Pennsylvania where similar formations are
5 now being drilled.

6 The study in Forth Worth of air has
7 been mentioned. I want to call your
8 attention to a story released and published
9 in Business Week last week and
10 propublica.org that cited more than 1,000
11 cases of water contamination documented by
12 courts and local governments in Colorado,
13 New Mexico, Alabama, Ohio and Pennsylvania.

14 I also want to call your attention to
15 research by the director of the Endocrin
16 Disruption Exchange, Theo Colborn, who has
17 testified before Congress about threats to
18 virtually all human body systems posed by
19 the chemicals found in the gas production
20 process. There are many specific cases
21 that you can read. It's not hard to find
22 them. We have the golden opportunity to
23 learn from the mistakes of these other
24 states, who, by the way, are now rushing to

1 implement very stringent regulations and
2 restrictions in places like Wyoming that
3 are very pro drilling as a rule.

4 I don't have time to mention here the
5 study that's frequently cited by many
6 proponents from the EPA of 2004. That was
7 a study, very definitively indicates that
8 that does not tell us that fracing is safe
9 in terms of the migration of fluid through
10 formations into the water.

11 One other point I think is very
12 important to make, is that the industry
13 must, and I commend the DEC and governor
14 for assisting on this, must publicly
15 disclose what is in the fracing fluids.

16 There's all kinds of reasons but one
17 that comes to mind is in a story reported
18 (applause) and then picked up nationwide in
19 Newsweek, and many of you probably heard
20 about this story. There was a nurse, the
21 nurse was treating a gas worker in a
22 fracing field, in the emergency room who
23 nearly died from multiple organ failure due
24 to chemical exposure to something, we still

1 don't know what, that was on the worker's
2 clothing but since proprietary information
3 trumped health, we still don't know what
4 the problem was.

5 No other industry enjoys the right to
6 engage in major industrial activity
7 involving dangerous substances and cross
8 practices with almost no local regulation
9 and zoning. And under the current law,
10 they remain exempt from major, federal, air
11 and water protections. If I wanted to
12 start a farm or a dry cleaning business, I
13 would be subject to far more regulation.

14 I think one thing that needs to be
15 considered is the repeal of Environmental,
16 ECL23-303 which removes home rule for oil
17 and gas drilling from localities. I think
18 local governments need to have authority.
19 I know this is a revolutionary prospect
20 right now, but I think we need to consider
21 this because the Marcellus play is a
22 revolutionary change.

23 The cost of not fully and effectively
24 regulating this industry is very great,

1 both in dollars and in cents and in terms
2 of things that are priceless, the health of
3 ourselves and our children, the purity of
4 the air, water and land we need to survive.

5 I'll conclude by saying that we need
6 to dispose of another myth. Protecting the
7 environment is not only about wildlife and
8 plants that are very important, it's about
9 protecting also businesses and our economy
10 that rely on a clean environment.

11 Agriculture, tourism, outdoor pursuits like
12 hunting, camping and fishing could easily
13 suffer when a major industrial activity
14 moves into the region.

15 I won't repeat what's been said about
16 the IBM toxic plume. Let's not repeat
17 mistakes that have been made for economic
18 reasons in the past.

19 The Draft Scope document currently,
20 and this is a process and I understand
21 that, but it needs far more detailed
22 analysis of a lot of these issues. I have
23 specific things I'll call for in my written
24 remarks but there are significant

1 alternatives that need to be in that scope
2 or to current practices and mitigation
3 measures as identified and as called for in
4 the law governing scoping processes.

5 Finally, whatever the outcome of this
6 regulatory process, the history extracted
7 in other hazardous industrial processes
8 tells us that only those citizens who are
9 organized and active with community
10 interests can have any real assurance that
11 their health and safety are protected.
12 That, not money or politics, is the bottom
13 line. If we are to live in this place for
14 generations, and that personally is my
15 plan, and look to our grandchildren and
16 look them in the face and say, we did the
17 right thing, then we really need to think
18 about this. Thank you.

19 ALJ: Next speaker is Chris Burger,
20 Binghamton Regional Sustainability
21 Coalition, followed by Brad Gill.

22 SPEAKER: Thank you very much. The
23 Binghamton Regional Sustainability
24 Coalition is a community group dedicated to

1 sustainable development in the healthy,
2 long-term viability of the area.

3 This group recognizes that there are
4 many benefits of gas development and would
5 be supportive if done responsibly. Like so
6 many people are beginning to express along
7 with the growing number of their elected
8 officials, we are looking for responsible
9 drilling and looking to the DEC for
10 protection from its adverse impacts. We
11 expect nothing less.

12 At the end of the day, the gas
13 drilling companies will have our gas and
14 lion's share of the profits from the gas
15 and will have left town. The community, I
16 think can be forgiven for concentrating
17 more on the long-term consequences. It is
18 we after all who love our community and
19 plan to live here for some time to come and
20 who will be living with the long-term
21 consequences.

22 BRSC understands that nothing can be
23 done to eliminate the dangers posed by gas
24 drilling. BRSC has, however, taken time to

1 develop a list of concerns and suggestions
2 that we feel can reduce these dangers.
3 Many of these concerns and suggestions will
4 be incorporated into our formal written
5 comments to the DEC, but let's be clear and
6 honest with ourselves. At the end of the
7 day, if the science is telling us that
8 these dangers cannot be mitigated, we need
9 leaders of integrity to put health, safety
10 and welfare of its people first and
11 foremost.

12 Having said all that, I would like to
13 concentrate in my verbal testimony on one
14 overarching procedure as you evaluate the
15 environmental impacts of its practice.

16 The main purpose of conducting a
17 "Generic Environmental Impact Statement" is
18 to eliminate the need for conducting an
19 individual EIS for each and every drill
20 site. Individual EISs would be required to
21 take into account the preceding project so
22 that the cumulative affects would be
23 documented and analyzed. It stands to
24 reason that a generic EIS that is designed

1 to eliminate the need for these individual
2 studies, would attempt to visualize and
3 analyze a fully built-out scenario.

4 This supplemental EIS should do its
5 analysis of cumulative effects of all the
6 individual projects those individual EISs
7 is supplanting. This would take into
8 account the total anticipated sites along
9 with the infrastructure, the roads,
10 collection pipes, compressors, et cetera.
11 It would also take into account the
12 cumulative affects of such things as water
13 withdrawal, waste disposal, loss of
14 vegetation as it relates to flood
15 mitigation, et cetera.

16 Really, all those things the DEC and
17 the people of these hearings bring up will
18 need to be analyzed in the context of a
19 fully built-out scenario.

20 As a mitigation measure, DEC could
21 very well recommend an acceptable phasing.
22 This too should become part of the
23 analysis. What phasing rate makes sense to
24 reduce impact? What does a fully built-out

1 scenario look like? One suggestion would
2 be that the DEC convenes a group of
3 drilling experts from a variety of sectors
4 to develop a consensus. To reduce the
5 possibility of wellboring, it should be
6 stipulated that whatever is decided will be
7 the upper limit of what this particular
8 Supplemental EIS will cover and the
9 additional activity will require yet
10 another EIS that will then take into
11 account the activity that has preceded it.

12 It is our fervent hope that DEC has
13 come to recognize that this is a whole new
14 level of gas drilling activity and while we
15 can certainly learn from the past, we
16 cannot continue to rely on past practices
17 to fully address what is before us. It
18 will require creative thinking. Now more
19 than ever it will require taking a hard
20 look at long-term consequences. It may
21 even require exploring new ways of using
22 the technology to reduce the footprint of
23 the drilling activity. This may include
24 the requirement of gas drilling consortiums

1 that combine drilling spacing units and
2 require a longer underground reach from
3 each site.

4 New GPIS enables much more controlled
5 directional drilling and should be
6 utilized. The state should require the new
7 technologies designed to reduce water
8 consumption, closed-loop systems and less
9 toxic frac fluids as well. Nothing should
10 be off the table as it relates to ensuring
11 the long-term viability of our area.

12 With the economic slowdown and the
13 temporary dip in fossil fuel prices, we
14 have been given a reprieve in what was
15 beginning to look like a mindless stampede
16 towards gas drilling. We have been given
17 the rare opportunity to step back, take a
18 breath and think things through. Despite
19 what some gas companies are suggesting and
20 despite what some people will hope will
21 happen, if the truth be told, gas drilling
22 in this area is not going to disappear.
23 The gas isn't going anywhere and it's value
24 will only increase. It's up to us to use

1 this rare gift of time wisely.

2 We will be forwarding our written
3 comments to you shortly and thank you very
4 much for your time.

5 ALJ: Thank you. Next speaker is
6 Brad Gill, Executive Director of the
7 Independent Oil and Gas Association of New
8 York, followed by Scott Lauffer. Mr. Gill?

9 SPEAKER: Thank you very much. My
10 name is Brad Gill and I have 28 years of
11 experience in the oil and gas industry.
12 I'm a petroleum geologist certified with
13 the American Association of Petroleum
14 Geologists. I'm president of Earth Energy
15 Consultants, an oil and gas exploration and
16 consulting firm. I'm vice president of
17 Chautauqua Energy Drilling, operator and
18 producer and like I said, I'm executive
19 director of the Oil and Gas Association of
20 New York.

21 Now, on behalf of the association I'd
22 like to provide our members' comments with
23 regard to the draft scoping document for
24 the SGEIS relating to natural gas well

1 development projects.

2 By way of introduction, IOGA is a
3 trade association formed in 1980 to
4 protect, foster and advance the common
5 interests of oil and gas producers of
6 professionals and related industries in the
7 State of New York. We have 335 members
8 statewide. We do represent the industry,
9 all facets of the industry, large and small
10 companies across the state. Our comments
11 are specific to the scoping documents and
12 at this hearing we'll discuss issues
13 relating to the community character.

14 The scoping document specifically
15 mentions the DEC will be evaluating the
16 impact of Marcellus Shale gas drilling on
17 land use patterns, traffic, community
18 impacts and economic and energy supply
19 impacts. Accordingly, we have the
20 following comments on several of these
21 issues:

22 Air quality. There's not a lot of
23 equipment currently in the area for
24 Marcellus drilling and completion. By way

1 of technology, the newer equipment that's
2 being utilized, it's being built to a
3 stricter standard than most of the existing
4 over-the-road farming equipment currently
5 in use. It should also be noted that
6 equipment emissions are very temporary by
7 area and will be transient like most
8 over-the-road equipment.

9 As it relates to gas compression,
10 most compressors will be set at a
11 compression site and if they're large
12 enough, they'll have emissions controls
13 like any other stationery engine projects.

14 The Marcellus natural gas, it's
15 amazing that it has been cooked to the
16 point of it being a very high quality, dry
17 gas. Most emission issues related to
18 produced fluids are related to the
19 heavier-end hydrocarbons such as oil, which
20 are not expected to be present in this area
21 of the Marcellus trend.

22 With regard to water quality, all
23 chemicals used in the hydro-fracturing
24 process will be disclosed to the DEC at the

1 time of the application. Therefore, the
2 DEC will have a full opportunity to
3 evaluate the chemical composition. Under
4 current operations, benzene, xylene or
5 toluene are not used in well stimulation or
6 drilling in the Marcellus or other shales
7 in this area.

8 The chemicals used in the stimulation
9 treatment are designed for a specific
10 purpose. They're very limited in their
11 concentration and use. Biocides are used
12 to prevent bacteria growth. Granulated
13 polyetherimides are used as friction
14 reducers, they lower pumping pressures.
15 Polymers are used to prevent carbon steel
16 buildup. It's a fact that they're used
17 with fluid recovery. These are largely
18 benign in nature, they're widely used in
19 areas of society today.

20 Groundwater aquifer contamination and
21 downhole stimulation will not be an issue
22 because of the water screening requirements
23 in existing regulations and depth of the
24 natural gas zone, as compared to the water

1 bearing aquifers. Typically they're just
2 separated by thousands and thousands of
3 feet. Stimulations will occur in
4 steel-cased wellbores much deeper than the
5 fresh water aquifers.

6 With regard to water volume, the
7 volume of water intended to be used by the
8 entire oil and gas industry is small
9 compared to the existing water uses of
10 power generation and recreation.

11 In addition, the water use will be
12 scattered throughout the water basin and
13 minimized in finite areas which other
14 sources such as industrial or effluent
15 sources from existing facilities are being
16 explored as water uses and sources. It's
17 important that the use of these fluids is
18 acceptable to stimulation guidelines, isn't
19 hampered by unnecessary permitting and
20 restrictions.

21 Water will be pumped when feasible to
22 minimize truck traffic, but if hauling is
23 necessary, planning is used to minimize the
24 truck impacts.

1 Industry is evaluating guidelines
2 affecting existing water treatment
3 facilities, enable the use of these
4 facilities as a resource for waste
5 disposal.

6 In addition, the oil and gas industry
7 is exploring the reuse of stimulation
8 fluids as a means to minimize disposal, as
9 well as minimize the consumptive use of
10 fresh water.

11 Regarding roads and infrastructure,
12 the equipment used in the oil and gas
13 industry is permitted or licensed to use
14 roads just like any other piece of
15 equipment on the roads. Traffic patterns
16 are usually designed to utilize roads and
17 bridges meant to handle these loads.
18 Companies typically work with the
19 municipalities to protect the roads and
20 repair them as needed. Moreover, many
21 companies provide bonding to assist in
22 providing any capital needs that are not
23 covered by the repairs made by the
24 operators. Most companies will try to use

1 local people for long-term jobs and the
2 contract as utilized is temporary to the
3 area.

4 Regarding noise. The noise
5 associated with temporary activity of
6 drilling and completing a well is as
7 stated, temporary. It should be noted that
8 there are no permanent drilling sites.
9 During the citing of the wells, operators
10 meet and discuss issues relating to
11 equipment on the landowner's property.

12 In most cases of non-conventional
13 shale development, the compression is at a
14 location selected after considering the
15 external factors associated with noise and
16 visual impact.

17 These issues are mitigated and
18 addressed in the designing of the overall
19 compression facility. Various existing
20 technologies are available to mitigate
21 noise and are very commonly used in the
22 gathering system designs.

23 Lastly, the socioeconomic impacts.
24 It's hard to predict the economic impact of

1 an exploration play. But based on the
2 existing drilling done in Pennsylvania and
3 reported results, we can make some
4 assumptions that define the dramatic
5 positive impact of this opportunity. New
6 York producers pay admirable income taxes,
7 these are essentially property taxes, on
8 production from wells operated in the
9 state. Regardless of the taxable status of
10 the property on which the wells are
11 drilled, there will be tax revenue for
12 wells that are producing.

13 New York's producers have worked hard
14 to maintain this as the tax screening from
15 production, because we believe that the
16 property tax system is the fairest approach
17 to compensation to the local municipalities
18 affected by the exploration operations.

19 Realizing that initially the
20 equipment and manpower will probably not be
21 available for full-scale development of the
22 Marcellus, we've made some assumptions that
23 will provide some information on the impact
24 of this development.

1 Annual property tax revenues to the
2 county, town and schools is expected to be
3 in excess of 18 million dollars per 300
4 wells drilled. In addition, total annual
5 economic impact of approximately 1.4
6 billion dollars is within reason.
7 Landowners could also expect to receive
8 annual royalties in the range of 100
9 million dollars and paying the state
10 approximately 6 million dollars per year in
11 additional income taxes. This is a
12 significant value and only touches the
13 development of this resource. In a
14 comparative sense, this would be the
15 equivalent of a property owner who has
16 1,500 acres paying 18 million dollars a
17 year in property taxes. This could
18 substantially reduce the tax burden on
19 property owners in areas with Marcellus
20 development.

21 Again, under the current tax
22 structure, tax revenues stay local with the
23 municipalities benefitting the county,
24 schools and town.

1 In conclusion, utilization of
2 indigenous natural gas of the
3 transportation fuel and an industrial
4 energy or electrical generation supply,
5 will assist Upstate New York in its
6 advancement of energy independence and
7 efficiency, all while protecting the
8 environment.

9 ALJ: The next speaker is Scott
10 Lauffer. Followed by Raymond Nolan. Mr.
11 Lauffer is the chair of the Susquehanna
12 Group Sierra Club, Atlantic Chapter.

13 SPEAKER: Thank you for allowing me
14 to speak. I'm also representing the Sierra
15 Club Atlantic Chapter. As a preface, the
16 Sierra Club Atlantic Chapter applauds the
17 governor's decision to call for a
18 Supplemental GEIS. And what was acceptable
19 with the 1992 GEIS, we all know, cannot be
20 viewed as acceptable with today's situation
21 with the Marcellus Shale and the similar
22 formations.

23 We welcome this opportunity for all
24 citizens and stakeholders to add input to

1 this process. We have many concerns that
2 we will address with written comments but
3 for the purposes of my oral statements
4 tonight, we want to concentrate on the
5 chemicals used on hydraulic fracturing.

6 Although the Draft Scope states that
7 it will require information about these
8 fracturing fluid additives, this is clearly
9 not enough protective action to ensure
10 safeguarding of the environment and health
11 of this state.

12 The DEC began asking for the exact
13 chemical makeup of fracturing fluids for
14 the first time in June of 2008. It is
15 known that the industry does not want to
16 reveal their formula which requires
17 revealing the exact amount of chemicals
18 used. And they also only list chemicals by
19 generic heading, as we just heard.

20 Identifying both exact names of chemicals
21 and quantities is imperative. The DEC,
22 along with the DOH, is going to ensure that
23 environmental protection and public health
24 and safe drinking water objectives are met

1 which are the objectives stated in the
2 Draft Scope. To call on the DEC to
3 prohibit the use of all potential toxic
4 materials that exceed EPA determined safe
5 levels, although as science advances, even
6 these safe levels come into question. As
7 example, benzene has been identified as a
8 human carcinogen. All exposure should be
9 completely avoided. I just heard Brad Gill
10 say that benzene is not used, I take him at
11 his word for that, but any other toxic
12 chemical is usually measured by EPA
13 standards in parts per billion. If you
14 take a million gallons of water, it only
15 takes an ounce or less to exceed EPA
16 levels.

17 Since events of accidental discharge
18 for improper handling can occur, as the
19 Draft Scope identifies as a potential
20 impact, an analysis to know what levels
21 should be allowed during the drilling phase
22 should be part of the scope. Using
23 non-toxic fracing fluids would eliminate
24 the possibility of all chemicals that are

1 introducing toxic contamination. And a
2 study of this should also be part of the
3 scope.

4 The Draft Scope for now inadequately
5 addresses fluid disposal. It is clear that
6 the infrastructure is not in place to
7 insure proper disposal for the expected
8 high level of gas production. At present
9 only two plants in Pennsylvania can produce
10 fluid of the gas production. And the Draft
11 doesn't indicate which municipal waste
12 water treatment plants can handle brine
13 waste.

14 A treatment plant in Norwich recently
15 turned away a waste hauler with spent fluid
16 from a drill operation, indicating that the
17 fluid disposal can be left up to individual
18 haulers. The DEC cannot say where the
19 hauler ended up taking the fluid, revealing
20 that oversight of this process is severely
21 lacking and needs to be addressed more
22 strongly in the Scope. Waste disposal
23 sites should be identified and approved, as
24 well as enforced by the DEC.

1 The reference to the use of injection
2 wells in the Scope as an alternative to
3 hauling waste treatment plants is lacking
4 specifics. It is known that injection
5 wells in Texas and elsewhere are a concern
6 and have caused the city of Forth Worth to
7 issue a moratorium against them. Fractures
8 in the rock layers can cause chemical
9 seepage and these threats to drinking water
10 need to be eliminated.

11 This requires a thorough set of
12 regulations detailing what is appropriate
13 for use as injection wells, something the
14 state of Texas is looking at in its
15 legislation.

16 We believe that the DEC should do an
17 analysis within the scope and identify the
18 regulations needed for proper siting and
19 safe use. It is not sufficient, nor good
20 science to think that storing chemicals
21 deep in the ground will not present a
22 future problem.

23 It was once thought that the toxic
24 chemical TCE was safely captured under the

1 ground in Endicott here in Broome County.
2 About 24 years after TCE was known to be in
3 concentration underground, it was
4 discovered that it would move to the
5 surface by the process known as vapor
6 intrusion. The 100 homes and buildings
7 that were leveled, there were many cases
8 many times above the state's guidelines.
9 Today over 500 homes and buildings in
10 Endicott require ventilation systems to
11 keep the levels within the structure safe.

12 Just as we know that we are not safe
13 from TCE underground, we can't assume that
14 spent fracking fluids will not find its way
15 to the surface or in the drinking water
16 supplies.

17 Although the Draft Scope states that
18 gas production as existed in New York for
19 50 years without any known incident of
20 drinking water contamination, it is not
21 know that contamination hasn't occurred.
22 We note that for the past 50 years the
23 State of New York has not known what
24 chemicals it has been permitting in

1 subsurface injections.

2 It's known that Project Drinking
3 Water Wells have been blown out by drilling
4 activity in North Brookfield and obvious
5 groundwater contamination has occurred in
6 areas of Chenango County which were
7 reported to the DEC.

8 This event was never properly
9 addressed. By the time DEC got to the site
10 four days later, the contamination had
11 dispersed down stream. There has been
12 groundwater contamination issues in the
13 past. They may not have been realized
14 because:

15 One. There has been no requirement
16 to test water quality before, during or
17 after gas well development.

18 Two. Contamination is difficult to
19 qualify and test for the chemical's
20 constituent in the fracking fluid are
21 unknown.

22 Much of the natural gas development
23 in New York State has occurred in rural
24 districts where contamination issues may

1 not be immediately obvious. Sorry, that
2 was point three.

3 Point four. When hydraulic
4 fracturing and other forms of stimulation
5 have disrupted the flow of -- or quality of
6 private water wells, the responsible
7 driller has responded with monetary
8 compensation and treatment equipment before
9 the DEC is notified or even involved.

10 I conclude by urging the DEC to go
11 back and test groundwater quality in areas
12 that have experienced significant natural
13 gas development to confirm that it's
14 apparently addressed the safety record. We
15 can suggest a random sampling of drinking
16 water wells in the areas, such as Spring
17 Port in Tioga County, McDougal in Seneca
18 County and Chautauqua County. Thank you
19 for allowing me to speak.

20 ALJ: Thank you. Raymond Nolan, a
21 member of the County Line Landowners.
22 After Mr. Nolan is Wallace Crosby.

23 SPEAKER: Good evening. Our
24 organization thanks you for the opportunity

1 to participate in this process. We will be
2 submitting formal written statements to
3 this process between now and December 15th.

4 Tonight we wanted to emphasize a
5 couple of the major concerns that we have.
6 They have been ably tendered to you by
7 previous speakers. I would like to just
8 throw a little emphasis in that direction
9 and then bring up an issue that I have yet
10 to hear about or read about. And that is
11 the responsibilities of the various
12 regulatory agencies regarding their
13 oversight of this particular type of
14 activity.

15 It is absolutely without doubt that
16 any GEIS that does not carry with it the
17 identity of the constituents of these
18 fracturing fluids cannot, cannot be considered
19 adequately.

20 Documents in DEC's library to date
21 have suggested over the years that
22 landowners have their wells tested prior to
23 drilling as a baseline analysis. The same
24 might be suggested to those agencies that

1 supply potable water to municipalities
2 under DEC drilling. Without knowing the
3 constituencies of those fracing fluids such
4 analysis would probably be unaffordable by
5 the average individual because the search
6 for things that are unknown is a long and
7 tedious chemical process. The question
8 then becomes the accountability for paying
9 such costs and without knowing what those
10 constituents are, the cost can be great.

11 The scoping document needs to include
12 a discussion, however brief, of how we
13 source the baseline and project-related
14 water analyses be paid for.

15 The primary issue that I have yet to
16 hear about is the fiscal crisis in this
17 nation and in the State of New York and how
18 it will impact upon NYSDEC's ability to
19 efficiently and in a timely fashion,
20 monitor and enforce the permitted
21 activities by the drilling industry.

22 In addition to that, the term
23 environmental justice was used this evening
24 and I take that to mean that all people who

1 have a stake in the consequences of this
2 drilling be taken into consideration.

3 In our counties we have many people
4 who do not own land but they live there as
5 renters. They are not represented probably
6 here this evening in very great numbers.
7 They have no way of knowing how to contact
8 the agencies if there is a problem. They
9 have no way, certainly of joining in at
10 this point with groundwater or potable well
11 water analysis. They need to be brought
12 into this process. There may be a few of
13 them here.

14 Getting back to timely enforcement.
15 First, we know that applications for
16 drilling will be submitted to the staff of
17 Mineral Resources in Avon. That's a long
18 trip, somewhere east of here. We do not
19 expect under current fiscal conditions to
20 see even a maintenance existing staff if
21 history is any judgment. In fact, we
22 expect to see efforts to reduce staff in
23 line with the governor's request to reduce
24 spending. Almost certainly we'll see the

1 reduction in the ability to travel, given
2 the cost of fuel and the cost of travel
3 borne by the people driving their vehicles.

4 Additionally, the natural resource
5 staff that would be looking at issues other
6 than the drilling, that is wetlands
7 protected streams, are in Cortland for this
8 particular area. They are responsible on
9 an everyday basis for the administration
10 and the management of wetland protection
11 and stream protection. They will be the
12 ones called upon to look at these drilling
13 sites. Something is going to have to give.

14 The scoping document should include
15 the impacts that would accrue as a result
16 of removing staff from their normal duties
17 in order to take care of the requirements
18 placed upon them by this drilling activity.
19 The timeliness of communication between the
20 mineral staff and the natural resource
21 folks needs to be very closely looked at to
22 assure that something doesn't happen and it
23 waits four days before someone gets a
24 chance to look at it.

1 We would ask that the department
2 include in its Generic Environmental Impact
3 Statement, a hotline, if you will, or the
4 names and numbers of DEC staff made public
5 to the landowners in the areas of the
6 drilling so that they have a number that
7 they can call without calling several
8 different numbers and being moved from one
9 phone number to another.

10 Finally, and especially as a result
11 of previous speakers, the history of high
12 pressure, high-volume fracturing needs to be
13 included in the department's deliberations
14 when it puts together the Generic
15 Supplement Statement. The history wasn't
16 available at one time in the past, it
17 certainly wasn't available in 1992 and it
18 needs now to be brought forth in your
19 deliberations so that the Generic
20 Environmental Impact Statement truly does
21 enjoy an influence over these modern
22 drilling technologies. Thank you again.

23 ALJ: Thank you. Next speaker is
24 Wallace Crosby followed by Charlotte

1 Schotanus. Wallace Crosby? Is Wallace
2 Crosby here? Is Charlotte Schotanus here?
3 If Mr. Crosby comes back, someone can
4 indicate to us up here that he's returned
5 and we'll come back to him but in the
6 meantime we'll move on. Charlotte
7 Schotanus, go ahead.

8 SPEAKER: I'm Charlotte Schotanus,
9 and I'm not as eloquent as some of the
10 speakers but I'll try my best. My concern
11 is regarding the possibility of
12 contaminating the aquifer, the air and the
13 overall effect that drilling will have on
14 our community's health. There are many
15 here tonight that are only interested in
16 the money and will ask you to speed things
17 along so drilling can begin. I say, slow
18 it down. There are too many people at
19 stake to rush into this without proper
20 regulations in place. Do your studies of
21 what has happened in states such as
22 Colorado, Wyoming, Texas, et cetera. Check
23 how their water and air has been tainted
24 and how their lives have been changed

1 forever due to the resulting health issues.
2 Three of our most precious gifts in life
3 are fresh clean water, clean air and our
4 good health.

5 If you haven't yet had the
6 opportunity to listen to a presentation by
7 Dr. Theo Colborn of Colorado, you must do
8 so, as was mentioned -- her presentation
9 was mentioned by a previous speaker. She
10 has done studies on the chemicals used in
11 fracing and the effects on the human body
12 through the water and the air.

13 The number of fluids used for fracing
14 is quite astounding and the number of those
15 on the federal hazardous list is
16 overwhelming. What are you going to do to
17 protect the public from another "love
18 canal" or another "Endicott". What about
19 the landowners who want no part of this but
20 end up with contaminated water and air?
21 Are you going to protect the public by
22 preserving their clean water and air and
23 help with the expense caused in their water
24 if their water is tainted.

1 It is my feeling that if gas
2 companies are allowed to drill, no
3 chemicals at all should be used. The waste
4 water should be returned and treated and
5 used for their next well. When they are
6 done with all of the fracing, then the
7 water waste left should be properly treated
8 before it is even hauled to a disposal
9 site. The issue of air pollution from the
10 fracing waste is also a hazard concern.

11 The bottom line is to preserve the
12 water, air and the health of our community
13 for the present and for the future, our
14 generation and for all future generations
15 after us. We are, after all, our brother's
16 keeper. Purity of our water and air and
17 the health of our citizens are of the
18 utmost importance, even more so than the
19 money. We need to preserve these gifts.
20 Thank you.

21 ALJ: Thank you. Next speaker is
22 Yvette Akel, is she here? Followed by
23 Dereth Glance.

24 SPEAKER: Hi. I do not have a

1 written statement but I'd like to simplify
2 what a lot of other people have been
3 saying.

4 I think sometimes we get over
5 analytical and sometimes we get too
6 intellectual about things and I think we
7 have to get right to the point. The point
8 being water.

9 We are a geographic area that
10 encompasses not only Broome County but
11 Tioga County, Delaware County, Otsego
12 County, this whole wonderful area of the
13 Southern Tier that has the most pristine
14 water in the country and in the world. If
15 we take this water and contaminate it, the
16 Susquehanna River which starts somewhere in
17 Cooperstown and goes all the way down to
18 the Chesapeake Bay area, all of these
19 areas, the Delaware County Reservoir which
20 feeds eight to nine million people in New
21 York City and Philadelphia. We are envious
22 because of our water and our beautiful
23 geographic area. If we destroy this, if we
24 destroy this, what do we have?

1 And, you know, the economic benefits,
2 I keep hearing economic benefits, economic
3 benefits. Let's face it, the real economic
4 benefits are going to the gas and oil
5 companies. They're the ones that are going
6 to benefit from this. What is it going to
7 do to us? It's going to, they're going to
8 reassess all of our properties. And people
9 who think, who have signed these leases,
10 who think they're going to make all of this
11 money, by the time they end up paying New
12 York State, IRS and by the time their
13 property taxes go up again, really, how
14 much have they made in the long run?
15 Unless you own a thousand acres or unless
16 you have a county that's figuring in their
17 budget already these so-called revenues
18 from drilling, and it hasn't even occurred.

19 This is kind of governing we do not
20 need. We have seen what's happened on the
21 national level. We have seen what's
22 happened with our dysfunctional state
23 government and we've seen what's happened
24 on the local level. We have lacked the

1 leadership to take us into the direction
2 that we should be taken. There is no
3 reason for this area to be economically
4 depressed. We're rich. We're rich in many
5 natural resources. If we start destroying
6 this area, we're going to just destroy it.
7 There isn't going to be anything left.

8 And, you know, they're not telling
9 you also, I mean, we've heard a lot about
10 the chemicals which is a major thing here,
11 the chemicals, the federal law now does not
12 allow you to disclose at all. Of course,
13 they're not telling you that Halliburton is
14 one of the companies behind this so-called
15 cocktail mixture that they put in the frac
16 into these wells and, of course, we all
17 know whose behind Halliburton. But at any
18 rate, the fact of the matter is we have to
19 really consider this very seriously before
20 we start this because it's going to be more
21 detrimental to the area than it is in the
22 long run. And, you know, we have to think
23 of this planet for our children and future
24 generations. This "drill, baby drill"

1 attitude has got to stop. We've got to
2 start thinking in a green fashion. These
3 people have signed away their land and
4 leases. They could have had organic farms
5 or they could have leased it to other
6 people who might have wanted to raise bio
7 fuels. Why lease it to the gas and oil
8 companies, they're the only ones that are
9 going to make out?

10 So I plead with you, before you start
11 any of this drilling, do you honestly
12 believe -- and I really wish that you could
13 tell me because you represent the DEC. Do
14 you honestly believe that there will be
15 good regulations in place to protect us?
16 Do you honestly believe that? You really
17 do, you honestly believe that there's going
18 to be regulations in place to protect you
19 against contamination. Okay.

20 ALJ: I need you to wrap up your
21 comments.

22 SPEAKER: Okay. Those are my
23 comments. I really believe those have to
24 be in place. If they're not, we're all

1 going to be doomed. Thank you.

2 ALJ: Dereth Glance.

3 SPEAKER: Hi, I'm Dereth Glance I'm
4 the executive program director with
5 Citizen's Campaign for the Environment. I
6 appreciate the opportunity to testify
7 today. We'll be submitting formal comments
8 prior to the end of the scoping comment
9 period.

10 We commend the department for looking
11 at new drilling technology and the creation
12 of the SGEIS. Producing and harvesting new
13 sources of energy is a critical component
14 to meeting New York's energy needs.
15 However, CCE is committed to protecting New
16 York's drinking water and our water sources
17 as oil and gas exploration regulations and
18 procedures are developed.

19 Now to protect environmentally
20 sensitive important watersheds, including
21 the Great Lakes, Susquehanna and Delaware
22 River Basins and New York City's drinking
23 water, CCE recommends that the department
24 require meaningful consultation between the

1 Division of Mineral Resources and the
2 Division of Water, as well as interagency
3 consultations.

4 It was clear from the scope that the
5 passage of the Great Lakes, St. Lawrence
6 River Water Resources Basin Compact was not
7 included. We want to make sure that all
8 rules and regulations and legislation that
9 governs the consumptive uses of water are
10 included in the entire scope. This
11 omission underscores the fact that the
12 public needs interagency cooperation to
13 protect our water resources.

14 Further, CCE recommends that careful
15 consideration be made when drilling near
16 water bodies in Class A, in our impaired
17 waterways, on the 303(d) list, as well as
18 sole source aquifers.

19 Regardless of whether or not effected
20 watersheds have regulations that govern the
21 water withdrawal or consumptive uses, CCE
22 urges the department to require treated
23 water to be returned to its source
24 watershed. That includes all waste water

1 brine fracturing and fracturing fluid.
2 This practice, we believe, will create more
3 uniformity across basin lines and provide a
4 uniformed regulation that does not conflict
5 with other major watersheds.

6 We agree that water withdrawal
7 standards should include impacts to public
8 water supply, public denigration of the
9 streams designated bed use, potential
10 impacts to wetlands, fish and wildlife and
11 strong preventive measures to guard against
12 the transfer of invasive species.

13 Now, the department is soliciting
14 comments on fluid handling and removal at
15 the well site. We agree that the pit
16 liners, that the pit liners specification
17 should be detailed and we also believe that
18 steel tanks should be required for drill
19 pads, especially near waters that are Class
20 A on the 303(d) list and are sole-source
21 aquifers. We commend the department for
22 requiring all waste fluids to be removed
23 prior to the pits being reclaimed.
24 However, we're incredibly concerned with

1 the proposed underground injection control
2 of waste water fluids, we do not believe
3 it's adequately addressed treatment and
4 return of water.

5 CCE supports the department's
6 decision to collect information from
7 operators regarding the volume and the
8 composition of the spent fracing fluid. We
9 strongly support that the DEC discloses
10 this information to the public. In
11 addition to that spent fracing fluid, the
12 department should not allow confidential
13 business information of proprietary
14 concerns to keep the public from
15 understanding exactly what chemicals are
16 being used for hydraulic fracturing. The
17 public has a right to know what's in the
18 water -- (applause).

19 We also support the feasibility study
20 for reuse and reclamation of the flowback
21 fluids. It's interesting, I was at our
22 recent meeting at NYSERDA on Monday and one
23 of the researchers that was discussing this
24 issue, indicated that nitrogen was actually

1 a more beneficial substance for natural gas
2 drilling. So we strongly encourage the
3 department to fully evaluate using nitrogen
4 as an alternative to water for natural gas
5 extraction to include the potential
6 implications to the climate, to public
7 health, to water quality and to now include
8 -- in this alternative. We understand that
9 nitrogen costs more than water, but we want
10 to understand what the difference would be.

11 And, finally, we believe that New
12 York State should set up a public water
13 protection fund, funded by the oil and gas
14 drillers. The public water protection fund
15 would be used to provide for any unforeseen
16 damages to drinking water and natural
17 resources damage that we can't even
18 comprehend right now.

19 CCE believes that the DEC should
20 require as a condition of the permit,
21 establishment of the public water
22 protection fund until all parties deem the
23 well-decommissioning is successful. Thank
24 you for the opportunity to testify.

1 ALJ: Thank you. The next speaker
2 is, I believe Laura Seltz followed by Steve
3 Parmeter.

4 SPEAKER: Hi, thank you so much for
5 coming. First I wanted to say how proud I
6 am to live in Broome County and I just love
7 my community. One of the things that I
8 find the most sad about this is the impact
9 that it's having on dividing us. We've got
10 our landowners, we've got so-called
11 environmentalists, we've got health
12 advocates. What I'm seeing though more and
13 more, is that there's a lot of unity. And
14 one area where we can be unified on is the
15 issue of health. A lot of people have
16 brought this up before tonight, I might end
17 up repeating some things that are worth
18 repeating.

19 Now, first of off, I've been talking
20 to a lot of folks, I'm a member of a great
21 coalition in Windsor and I've been talking
22 to other folks who have been working with
23 coalitions. And I'm getting this rap that
24 the gas companies are coming in and some of

1 the guys from the gas companies are saying
2 that, don't worry, Mr. Gill -- who seems
3 like a very honorable guy -- is saying, we
4 won't have benzene, we might do this, we
5 will try bonding, some companies try to do
6 this -- I didn't get your words right, Mr.
7 Gill, I apologize. But this is something
8 we need to keep in our minds. These are
9 great people, they might be fine people,
10 great family men, family women. However,
11 they, their job is to protect the
12 stockholders of their companies. I mean,
13 that is their job, that's where their honor
14 lies. Okay.

15 And my friend makes fun of me when I
16 say this word "honor" but really, okay. So
17 when we're dealing with people, I like to
18 like everybody, but the fact is, the reason
19 we need regulations, is that corporations,
20 they might say, I'm going to be your good
21 neighbor but their job is to be the good
22 neighbor of their stockholders or else
23 their stockholders will sue them, okay. So
24 we really need to be very careful about

1 what we're hearing from gas and oil
2 companies and how we're taking them.

3 Now, in terms of health. Fracing
4 fluid, we brought it up before.

5 Apparently, obviously people have said that
6 we aren't allowed to hear what's in the
7 fracing fluids. And I thought this was
8 funny, Scott Rudnick, the vice president of
9 corporate development at Chesapeake Energy,
10 he said it's like Coke protecting it's
11 syrup formula. Barbara, do you mind
12 grabbing that can? Now, my husband drinks
13 Diet-Pepsi but this is with lime, supercool
14 stuff. And Coca-Cola and Pepsi, they list
15 their ingredients here. Carbonated water,
16 caramel color, natural flavors,
17 phosphoric acid. But my husband will
18 tell you this isn't the same as Diet-Coke
19 with lime. I won't make this point go on
20 too long but here it is. Obviously, if
21 this is proprietary, they can still be
22 listing out the ingredients and have it
23 remain proprietary. It's how it's done in
24 industry everywhere. I don't know why this

1 is kept a secret. There's no reason for it
2 to be unless -- I won't speculate here.

3 Now, the problem is here, you know,
4 Windex has to release its chemicals. On
5 the bottle of Windex I buy at the shop, I
6 have to hear what the chemicals are in that
7 Windex. Coke has to. But the thing is, I
8 got a choice whether I'm going to drink
9 Coke, whether I'm going to use Windex. I
10 can't choose whether I'm going to drink
11 water or breathe. And as others have
12 mentioned, there's a group called the
13 Endocrin Disruption Exchange, it's lead by
14 Theo Colborn. She's referenced by
15 scientists as the EPA in the U.S.
16 Geographical Survey. And she's found that
17 65 chemicals are hazardous under six major
18 federal laws in one of her studies and has
19 compiled a list in other states. The mix
20 can include 92 MBT for short, I won't even
21 give you the long name. Ethanol, non --
22 pethanols, toxic metals, a whole assortment
23 of chemicals and we're talking a list too
24 many to name. Over 300. 65 have already

1 been found to be dangerous. These are
2 exempted under the 2005 Energy Act from
3 every, just about every conceivable
4 environmental protection, including Clean
5 Water, Clean Air, Clean Drinking Water,
6 Storm Hazard Act, Superfund and, of course,
7 Right-to-Know.

8 And the group found that, this
9 Disruption Exchange, that these chemicals
10 are utilized in all stages of natural gas
11 production. They can be both water soluble
12 and volatile and they're highly mobile.
13 That means they go through the water, they
14 go through the air, they're mobile. And,
15 in fact, they're associated with a variety
16 of health issues. You can actually do a
17 Google, just take a few of these chemical
18 names, specifically Google them and you'll
19 find a bunch of scientific studies linking
20 them to diseases. The most common of which
21 that Ms. Colborn found, organ toxicity,
22 neurotoxicity, which includes brain damage,
23 respiratory problems, gastrointestinal and
24 liver damage but we're also looking at

1 cancers, we're also looking at birth
2 defects.

3 Now, we talked about this before.
4 The process also involves the creation of
5 drill cuttings. The cuttings and the
6 produced water bring up things from the
7 ground.

8 Now, I'm going to advocate that you
9 require non-toxic fracing fluid. I don't
10 think there's a reason not to.
11 Unfortunately, we're also going to have to
12 be investigating what's coming up out of
13 the ground because we're getting
14 concentrated levels of radon, lead, mercury
15 and other substances. We just need to look
16 at the impacts of those.

17 Now, hydro-fracturing, just in case
18 anybody's wondering, one of the lines I've
19 been hearing from people is that there's
20 never been an instance of contamination.
21 Again, this might be true in New York,
22 we've got to look nationwide. In Business
23 Week, this is an article someone referenced
24 earlier. They cited that the U.S. Bureau

1 of Land Management tested 4,400 new wells
2 in a single county. The test showed
3 contamination in 88 out of every 220 wells
4 and found a plume stretching 28 miles.

5 Now, people in this area know very
6 well what a plume is. That's the area
7 underground where the chemical is
8 spreading. 28 miles. I live in Windsor,
9 that's enough to get me to Binghamton. And
10 I'll tell you, my friends in Binghamton and
11 Johnson City and Vestal have no idea what's
12 going on here and they're not going to make
13 any money off it. Okay. But this plume,
14 you know, this is just one study, if there
15 are, such plumes can reach 28 miles.

16 Researchers at the U.S. Bureau of
17 Land Management, this is an environmental
18 group, tried to take more samples but
19 monitors showed they contained so much
20 flammable gas that they might explode, so
21 they couldn't take more samples.

22 Now, I've heard people say that the
23 casings will protect the aquifer. However,
24 the Department of Environmental Quality

1 found benzene in a residential well after a
2 concrete casing cracked.

3 I've also heard people say earlier
4 tonight that the drilling will happen well
5 below our aquifer. It is true that this
6 shale, I think it's about 8,000 feet below
7 ground level. The aquifer at my depth is
8 300, I think my well is 300 feet deep.
9 However, a 2004 study of water by the EPA
10 shows troubling information. The report's
11 conclusions have been used to justify gas
12 drilling as the conclusions leave much
13 information in the report. But if you
14 check out the report on page 224, you learn
15 that the fluids from hydraulic fracturing may
16 migrate unpredictably through different
17 rock layers at greater distances than
18 previously thought in about half the case
19 studies in the U.S.A. They found biocides
20 and lubricants which can cause kidney,
21 liver, heart, blood and brain damage. This
22 is in an EPA study that has been used to,
23 basically it's really a -- to defend this
24 particular practice deregulated --

1 ALJ: Ma'am, I need you to wrap up
2 your comments. We have a lot of other
3 speakers --

4 SPEAKER: I'm sorry. I guess what I
5 want to end up with is this then and I
6 apologize if I took too much time, it
7 wasn't my wish.

8 ALJ: I know, I'm just saying in
9 recognition of the other people who want to
10 be heard before they leave.

11 SPEAKER: I'm so sorry. I guess I
12 want to say this. What I've been noticing
13 it's easy to turn off when we hear people
14 with different perspectives than we do.
15 What we need to be doing is listening to
16 each other. It's easy to turn off if we're
17 looking at a monetary amount and not see
18 the real human effects of what we're doing.
19 And what we need to be remembering is in
20 our hearts and in our minds, the people we
21 know who have had cancer, autism, multiple
22 sclerosis and then remember that we need
23 the following, we need solid science. The
24 department of -- the DEC needs the

1 Department of Health as a co-lead agency to
2 make sure that health is properly
3 addressed. We need to be studying the area
4 aquifer for contamination. And, finally,
5 we need to be working with a multiple
6 agency task force to also make sure that we
7 are getting the maximum amount -- I'm
8 sorry. I've gotten all nervous after
9 hearing I'm talking too long. Thank you
10 very much.

11 ALJ: And I would encourage anyone
12 who has a long prepared statement, we'd
13 like to receive it but if we receive it in
14 writing, it's counted equally as statements
15 given here. The time limit is imposed
16 solely so that we can hear as many people
17 as possible for the time they have allotted
18 here tonight. I recognize some of you have
19 other things to do this evening and you
20 signed up to speak at this hearing, maybe
21 even a few hours ago, so we're trying to
22 get to as many people as possible before
23 time forces some of the speakers to leave
24 before they're heard.

1 The next speaker is Kevin Miller
2 followed by Steve Parmeter.

3 SPEAKER: Thank you very much. I
4 just wanted to say a couple things. I
5 wanted to reiterate the non-toxic
6 substitute that somebody mentioned earlier.
7 As the scoping document speaks to
8 adaptability for onshore oil and gas
9 drilling, because onshore -- offshore
10 regulations are a lot stricter than
11 onshore. I think people on land should
12 have the same protection as the fish at
13 sea.

14 New York City was mentioned numerous
15 times, I didn't count them, I'd say it's 10
16 or 12, I think New York City water is
17 protected maximally. I think everybody's
18 water in New York State should be protected
19 maximally.

20 I also think the contents of fracking
21 fluids should be made known to the public,
22 not just to the DEC and the Department of
23 Health. Thanks.

24 ALJ: Thank you. Steve Parmeter.

1 SPEAKER: Good evening, can you hear
2 me? I'm Steve Parmeter. I've been in
3 Broome County for 21 years, I'm a member of
4 the Central Broome Landowner's Association
5 but my comments tonight are personal,
6 they're not representative of the
7 association.

8 I want to voice my support for the
9 natural gas drilling and specific for
10 horizontal drilling operations and
11 high-volume hydraulic fracturing to develop
12 the Marcellus Shale and other local gas
13 reserve reservoirs. I am confident that
14 the Central Broome Landowner's Association
15 steering committee is addressing many of
16 the expressed issues in the landowner's
17 leases with the natural gas companies. I
18 am concerned with and opposed to the types
19 and extent of various pollutions being
20 mentioned here.

21 I want to encourage you in your
22 scoping process. I served as -- I've
23 served previously as emergency medical
24 technician on the ambulances. I've served

1 as county coroner in St. Lawrence County,
2 New York between July 1982 and December
3 1986. Drilling site contamination of
4 workers has been brought to your attention
5 here tonight. In my opinion, the best way
6 to medically recognize and treat human or
7 animal medical emergencies is through full
8 disclosure of drilling operations by
9 natural gas companies. This should be done
10 as commonly by natural gas companies as
11 financial disclosure statements are done by
12 commercial banks and customer loans.

13 And that's, I think it's within your
14 power to address this issue and I am
15 confident that once your scoping operation
16 is done, New York State will probably have
17 some of the strictest drilling operation
18 codes in the United States. Thank you.

19 ALJ: Thank you. Next person will be
20 Grant Seabolt, STW Resources, Inc, followed
21 by Roy Lackner.

22 SPEAKER: Good evening. I'm Grant
23 Seabolt, I'm in-house counsel for STW
24 Resources, Houston, Texas and I'm pleased

1 and honored to offer these comments
2 tonight. STW has teamed up with General
3 Electric and Process Technologies to offer
4 waste water recycling services to the oil
5 and gas industry.

6 ALJ: You're going to have to move
7 closer to the mic.

8 SPEAKER: We teamed up with General
9 Electric Water and Process Technologies to
10 offer waste water recycling to oil and gas
11 industries. To put the matter into
12 perspective, in order to have successful
13 gas production, you need to have a good
14 formation, you certainly have that in
15 Marcellus. You also need to have a good
16 supply of water, certainly also have a good
17 supply of water. But the third thing you
18 need also is you have to have a way to deal
19 with the waste water produced in the
20 operations. Right now there's basically,
21 you know, three ways of dealing with it.
22 One is an injection well, second is a brine
23 process in the treatment facilities and the
24 other is to putting it into the municipal

1 waste water treatment facilities. At some
2 point in time the ability of the
3 infrastructure to accommodate that will be
4 reached. And so you have to look at
5 technological solutions in order to address
6 that to facilitate the production of gas in
7 order to get the economic benefits that
8 you're looking for.

9 In particular, STW Resources offers
10 the gas well operators in the entire
11 Marcellus Shale region, including New York
12 State, GE Water's 30 year plus proprietary
13 brine concentrator evaporative technology
14 that recovers up to 90 percent of flowback
15 water from horizontal drilling fracing
16 operations. This recycling process
17 transforms previously high saline content
18 waste water which is purer than public
19 drinking water. This technology is also
20 applicable to all oil and gas produced
21 water which results in normal drilling
22 operations.

23 STW also offers a zero liquid
24 discharge process whereby that portion of

1 the frac water and produced water which is
2 not fully recyclable by the brine
3 concentrator, is further processed using a
4 GE water crystallizer. This crystallizer
5 removes approximately 98 percent of the
6 water and resulting content is a salt cake.
7 And a salt cake can basically be certified
8 as a beneficial use such as road salt and
9 other beneficial uses. With both the brine
10 concentrator and the crystallizer
11 petrochemicals and any other potentially
12 hazardous substances are first removed
13 through a pre-treatment process. In short,
14 our brine concentrated crystallizer
15 transforms frac flowback water and produced
16 water into pure water for reuse. And it
17 basically sort of does this in a manner
18 approximately, what people have talked
19 about is a closed-loop system.

20 As noted in the Draft Supplemental
21 GEIS, we have already talked about the ways
22 in which waste water is currently being
23 handled. Obviously, the public sentiment
24 does not appear to back right now an

1 increase in disposal belts. And also at
2 some point the ability of rivers to
3 simulate and accept salt in this process
4 will be reached. So therefore, what we're
5 asking and what we're doing at this point
6 in time is educating the industry, trying
7 to educate regulators to technology
8 alternatives that allows you to take this
9 high content salt water and reuse it for
10 fracing operations or reintroduce it back
11 into public water in New York State.

12 Also noteworthy in the GEIS is
13 highlighting hundreds of truck loads of
14 water which are brought to and taken from
15 each well site. By recycling and reusing
16 the waste water streams, truck traffic
17 would be cut down as much as 50 percent
18 thereby lessening the strain of local
19 roads, bridges and supporting road
20 infrastructure. And there's also a result
21 of 50 percent or more decrease in carbon
22 emissions.

23 The Susquehanna River Basin
24 Commission considers water withdrawal used

1 in drilling operations, which can be
2 anywhere from three to eight million
3 gallons of freshwater per well, to be lost
4 forever for reuse. What we offer is an
5 alternative to help reuse a lot of that
6 water. Also in paragraph 4.2.1.4 of the
7 Draft Supplemental GEIS indicates that
8 mitigation measures should be used outside
9 of these basins which include the
10 evaluation of alternative water sources and
11 retreatment technologies.

12 STW Resources will be offering
13 detailed, written comments to the Draft
14 Supplemental GEIS regarding
15 recycling/reuse. And our comments will
16 highlight the beneficial results of
17 recycling/reuse. Including suggestions to
18 allow and encourage efficient movement of
19 recycled/reused water among well sites and
20 to and from recycling facilities. And
21 three, outline the advantages of safely
22 reintroducing recycled water into the
23 surface waters of the state to restore
24 surface waters and recharge aquifers.

1 STW resources is poised to present
2 innovative recycling technological
3 solutions to maximize the recovery of the
4 state's natural gas resources to decrease
5 or eliminate the need for salt water
6 disposal wells and to avoid overtaxing the
7 surface waters of the state with salt-laden
8 water. GE Water's Technological Solutions
9 offered by STW Resources can act as a
10 catalyst to increase gas production, which
11 correspondingly will increase new jobs and
12 overall economic benefits for citizens of
13 New York State.

14 This completes my prepared comments
15 and we look forward to commenting further
16 in writing. Thank you.

17 ALJ: Thank you. Roy Lackner,
18 followed by David Cornue.

19 SPEAKER: I did have a prepared
20 statement but there was some very eloquent
21 speakers that went ahead of me that pretty
22 covered everything except for my
23 introduction.

24 As the confederacy of the Iroquois

1 would do in regard to considering any new
2 plan of action, what will be the effect on
3 the next five generations. Unfortunately,
4 our planning doesn't even consider our
5 generation. With a dollar blind sight,
6 only huge mistakes are possible. Were the
7 DEC to propose this process to the five
8 tribes, they at best would be laughed out
9 of the longhouse and at worst invited to a
10 game of lacrosse with Mogua as referee.

11 Life in Upstate is precious and
12 revolves around our most abundant and yet
13 abused resource. Our water. Whether on
14 the surface, our rivers, streams, lakes and
15 ponds to underground springs, shallow and
16 deep aquifers, hydraulic fracturing
17 threatens this tenuous thread that binds
18 our lives. A new environmental Impact
19 Statement is what is really called for, not
20 this scoping process of an outdated 1992
21 document.

22 The scoping as it is called to amend
23 the antiquated GEIS of '92 can only fall
24 short of the study that really needs to be

1 completed. Political pressure by puppet
2 government officials with conflicts of
3 interest need to be quieted with a chill,
4 baby chill. For what is at stake here is
5 the most basic of human rights, clean,
6 unfettered and uncontaminated water.

7 I've been privileged to go to several
8 of SRBC meetings and I am astounded with
9 the amount of water that this industry is
10 already requesting. Some 52 million
11 gallons a day at the last request.

12 Upstream from us in Binghamton, they're
13 requesting 2.4 million gallons a day to be
14 taken from Oakland and Great Bend. They're
15 requesting five million gallons from
16 Chesapeake and Cabot Oil to be taken near
17 Athens and Tioga borders. Over 45 million
18 gallons a day is just a ridiculous strain
19 on our water resources. The issue that
20 needs to definitely be looked is the
21 occurrence of produced water and what
22 happened to Devon Energy in Louisiana where
23 they are coming up with 400 to 500 barrels
24 a day of polluted water because they hit

1 some type of Artesian system which is more
2 likely what is going to happen in this
3 area.

4 Terry Englander, a geoscientist from
5 Pennsylvania and our own scientist from
6 Fredonia, say that the Marcellus is
7 extremely radioactive from Broome County,
8 Wayne County, Susquehanna County and
9 Chenango County. For people to get an
10 idea, I passed out earlier a picture of
11 Jonah Field in Wyoming. That's a 40-acre
12 well spacing. There are 700 square miles
13 in Broome County alone. At a 40-acre well
14 spacing, that means we're looking at 11,200
15 wells requiring -- that's over -- at one
16 million gallons, that's over 11 trillion
17 gallons of water that they're going to need
18 to take from once pristine sources and then
19 contaminate it.

20 Weston Wilson, the EPA's 35-year
21 veteran who testified against the EPA
22 finding in 2004, his words need to be taken
23 to heart. We need to take to heart that we
24 have a new president that is going to look

1 at these exemptions that were given under
2 the Bush administration. We have two
3 senators from Wyoming and one from
4 Colorado, the Udalls who are going to be
5 looking into this hard. It's unfortunate
6 that the DEC, it has fallen to them to do
7 what the federal government should've been
8 doing for the last eight years and
9 safeguarding our water and our natural
10 resources.

11 As Mrs. Akel stated so eloquently, we
12 are sitting on one of the richest lands in
13 the world. I have traveled my whole life
14 and I settled in this area because of the
15 trees, the water, the streams. The other
16 day while brush hogging a field for deer
17 hunters, to no doubt take their bounty, I
18 watched two golden eagles land in a dead
19 oak tree, the amount of BTUs I can't even
20 calculate because the diameter was probably
21 60 inches around. That bird then flew, one
22 to the Delaware watershed near Deposit,
23 probably to fish and the other down the
24 Susquehanna towards Susquehanna for its

1 fishing.

2 We are sitting on an incredibly
3 unique ecosystem that needs to be
4 safeguarded with whatever it might possibly
5 take. This is a clear affront to what
6 needs to be responsibly done in this area,
7 the science is still out. The gentleman
8 before me has already pointed out that the
9 waste water treatment plants are already
10 overloaded. A waste treatment plant near
11 Pittsburgh on the Monongahela was ordered
12 by the DEC to reduce its intake of
13 fracturing fluids because already the
14 solidity downstream is getting too much.
15 And they're not even checking for the
16 radioactivity that needs to be checked for
17 in this waste water. And the use of brines
18 on our roads is an outrage and should not
19 be accepted because within the brines are
20 the heaviest concentrations of the
21 radioactivity.

22 Just to conclude, with Weston
23 Wilson's remark: "EPA's failure to
24 regulate the injection of fluids for

1 hydraulic fracturing reservoirs, appears to
2 be improper under the Safe Drinking Act and
3 may result in danger to public health and
4 safety." Already the other day in Lenox,
5 there was a case of a well that's been
6 polluted and in Dimmock already we know
7 there's cases of wells polluted. This is
8 just the tip of the iceberg. We need to
9 tell them to go back to the drawing board.
10 We need six years for people to get out of
11 these ridiculous leases that landmen
12 bamboozled them into. Some were told one
13 thing, they were given another. In
14 Louisiana they get \$35,000 an acre and a 30
15 percent royalty. They came up here and for
16 chicken change, before we realized how
17 thick our shale was, they grabbed this land
18 while preparing to make their rush. Thank
19 goodness for Governor Paterson telling the
20 DEC, go back and do your homework. But
21 what really needs to be done, as Sue Surya
22 from Cornell University says, do a brand
23 new environmental Impact Statement. This
24 is a colossus that is coming towards us

1 that needs to be stopped.

2 ALJ: Thank you very much. Next
3 speaker is David Cornue followed by Mark
4 Givens.

5 SPEAKER: Judge Buhrmaster, members
6 of DEC, I appreciate the opportunity to
7 speak tonight. My name is Dave Cornue, I'm
8 a senior geologist at ALL consulting. I'm
9 currently co-manager of the research
10 project concerning shale gas development
11 throughout the -- United States funded by
12 the U.S. Department of Energy and with the
13 Groundwater Protection Council as
14 co-researcher. This project will result in
15 perimeter of the shale gas development with
16 particular focus on the environmental
17 aspects of these activities. The perimeter
18 will examine the range of environmental
19 concerns, specific to shale gas development
20 and mitigation strategies in which to
21 address them. We anticipate publication of
22 the perimeter early in 2009. DOE's
23 projects such as this have technology
24 transfer components requiring presentation

1 and sharing of results.

2 Because of the applicability of our
3 work to the SGEIS, Chesapeake Energy
4 encouraged us to share our research with
5 DEC in their scoping process. Tonight I'd
6 like to speak specifically about water
7 management issues proposed to be evaluated
8 in the SGEIS. The existing Generic
9 Environmental Impact Statement largely
10 addresses these concerns. The primary
11 difference between the drilling of vertical
12 wells and horizontal wells is the volume of
13 makeup water required for drilling of
14 hydraulic fracturing. The existing GEIS
15 recognized the use of up to 85,000 gallons
16 of water by hydraulic fracturing a single
17 well. However, it did not assess the use
18 and management of the large volumes of
19 water typically required to fracture shale
20 gas wells.

21 Tonight I would like to address five
22 issues that are specifically related to
23 this and management of water required for
24 hydraulic fracturing.

1 relatively small in comparison to all
2 current water uses. The use for this water
3 for hydraulic fracturing will be dispersed
4 over a large area in a large span of time.
5 Therefore, with proper planning and
6 management, impacts to fish, wildlife,
7 downstream wetlands as well as denigration
8 of streams, designated use can be
9 prevented.

10 Second, prevention of invasive
11 species. Currently the practice with the
12 Marcellus in Pennsylvania and West Virginia
13 is to store up hydraulic fracturing water
14 in centrally located lined freshwater
15 retention ponds that serve multiple well
16 pads. Water for hydraulic fracturing is
17 transferred from those impoundments to
18 smaller impoundments at the well pads for
19 the fracing process. Water that's not used
20 in an individual frac, can then simply be
21 returned to the central retention pond and
22 used in a later frac job. In the event
23 some water remains unused and there is a
24 need of disposal of such water, there are

1 several options. It can be used for
2 beneficial uses such as irrigation,
3 livestock watering and used by local
4 industry. It can be returned to the
5 surface body water it came from, if it came
6 from multiple surface water bodies, it
7 could be treated before being returned.

8 Third, sufficiency in existing
9 authorities. The SRBC and DRBC are
10 regulating the use of all withdrawals for
11 shale gas drilling, regardless of
12 withdrawal rate. This ensures the
13 maintenance of instream flows and minimizes
14 impacts. Although the percentage of water
15 used is small compared to total use for
16 total volumes, there is a potential to
17 impact tributaries and smaller headwater
18 streams which may be attractive because
19 they are located nearer to drilling sites.
20 The SRBC and DRBC have jurisdiction over
21 withdrawals from such tributaries, just as
22 they do from the mainstem rivers.

23 Furthermore, the potential for
24 impacts to smaller streams and tributaries

1 can be avoided by planning for withdrawals
2 from streams and rivers that are less
3 susceptible to the intended withdrawal
4 rates that are designated as lesser quality
5 surface water bodies. Therefore, existing
6 authorities, the SRBC, DRBC, GLBC and DEC
7 provide adequate and appropriate protection
8 to surface waters relative to withdrawals
9 of horizontal gas well drilling and
10 stimulation.

11 Fourth. Wells specific review of
12 makeup water source. Because drilling
13 activity is widely dispersed in time and
14 geography, the overall water use for the
15 development of Marcellus Shale gas, as well
16 as other potential -- as well as other
17 shales in general, is unlikely to have a
18 potential to impact downstream wetlands or
19 other uses. However, there may be cases
20 where a particular water withdrawal would
21 warrant monitoring to insure the downstream
22 use or wetland is not adversely affected.
23 In many cases, centralized water storage to
24 begin can allow for more controlled

1 withdrawal of water from area water bodies
2 and thus, avoid adverse impacts from
3 periodic high withdrawal rates. As I
4 mentioned earlier, this is industry
5 practice for the Marcellus in Pennsylvania
6 and West Virginia.

7 Fifth, alternative sources of makeup
8 water are critical to continued success of
9 shale gas development. Alternative water
10 sources can help to minimize the impact on
11 an area's water use. Reuse of waste water
12 from drilling and development operations,
13 local industry or municipal waste water
14 effluent could provide some of the water
15 used for drilling hydraulic fracturing
16 shale gas wells. Similarly, non-potable
17 groundwater resources may also be useable.

18 Again, the existing GEIS is largely
19 addressing these concerns through proper
20 planning and management of the remaining
21 issues that can be effectively addressed to
22 allow for responsible development of shale
23 gas resources. Thank you again for giving
24 me the opportunity to present.

1 ALJ: Thank you. Next speaker is
2 Mark Givens followed by Carol Omalyel. Is
3 Mark Givens here? Is Carol Omalyel here?
4 If Mr. Givens comes back, a note will be
5 passed up here and we'll return to him. In
6 the meantime, we'll go to Carol Omalyel.

7 SPEAKER: I went to a drilling well
8 near my home on October 24th and saw
9 something that I thought was extremely
10 serious, so when I got home on the same day
11 I called the DEC. I was told someone would
12 call me back. Four days later on October
13 28th I received a phone call from a DEC
14 officer regarding my complaint. My point
15 is that the DEC did not respond to the
16 complaint for four days. By the time the
17 DEC responded, everything had been buried
18 at the well site. My suggestion, mistakes
19 are made things happen, there's
20 miscommunication. So my suggestion is that
21 all complaint calls should be recorded and
22 that there should be a simple number
23 similar to the 311 number in New York City
24 for complaints that everyone knows because

1 there's going to be thousands of wells and
2 I know you're not going to have enough
3 people. So people have to watch over their
4 own land and we all have to watch.

5 I have one more short point to make.
6 A moratorium should be called on all gas
7 drilling due to the fact the New York State
8 budget for the DEC has been cut by \$54,987
9 for the year 2009. I don't understand how
10 you're going to hire inspectors and
11 employees with a smaller budget. How are
12 you going to do this? Thank you.

13 ALJ: Barbara Kane-Lewis? Followed
14 by Gary Hauptman.

15 SPEAKER: My name is Barbara
16 Kane-Lewis, I'm a landowner in the Town of
17 Barker and I've lived in New York State
18 most of my life. I just wanted to say that
19 I am really hopeful that the DEC will take
20 the time needed for a truly comprehensive
21 review of the entire process of natural gas
22 drilling and production. I am very
23 concerned with the long-term consequences.

24 Other states have experienced water

1 and air pollution at and around drill
2 sites. More than 1,000 cases have been
3 documented in Colorado, New Mexico,
4 Alabama, Ohio, Wyoming and Pennsylvania.
5 We need to research these problems and
6 develop effective solutions to prevent
7 similar incidents occurring in New York
8 State.

9 Many New York State residents will be
10 exposed to the effects of the drilling and
11 production process. Fracturing fluids are
12 known to contain dangerous chemicals such
13 as benzene and should be carefully
14 regulated both during the drilling process
15 and after when fluids must be treated and
16 stored where soil and water contamination
17 cannot occur.

18 Air quality must be monitored and
19 controlled to limit airborne pathogens and
20 cancer-causing substances, from exposing
21 New York State residents to increased risk
22 from pulmonary and kidney dysfunction and
23 other long-term health problems.

24 In addition to this are issues of

1 long-term land use. Many rural areas are
2 used for agriculture and outdoor
3 recreation. New York State land must be
4 protected so that these uses remain viable.
5 Rural roads and bridges have not been
6 designed for the commercial transport that
7 will be part of the drilling and production
8 process. This will create serious hazards
9 to both the environment and residents which
10 should be addressed.

11 When developing the scope and the
12 environmental impact assessment, please be
13 sure to include a long-term perspective on
14 groundwater, surface water, air quality and
15 retention of dangerous substances in the
16 soil. Please take care and the time
17 necessary to develop a plan that will
18 insure long-term safety for all residents
19 of New York. Thank you.

20 ALJ: Thank you very much. Gary
21 Hauptman? Tim Whitesell? Again, if Gary
22 Hauptman returns to the room, he can let me
23 know or someone let me know and we'll
24 return to his card.

1 SPEAKER: Thank you for the
2 opportunity here to address you this
3 evening at the Binghamton scoping session.
4 My name is Tim Whitesell. I have the
5 privilege and honor serving residents of
6 the Town of Binghamton as the town
7 supervisor. However, I've been asked to
8 speak this evening, not in my official
9 capacity but as a member of the Town of
10 Binghamton-Conklin Gas Use Coalition and as
11 a spokesman for the following coalitions:
12 Northeastern Landowners, Central New York,
13 Western Barker, Kirkwood Gas Lease,
14 Windsor-Colesville, Tioga's Gas Lease
15 Organization, Country Line Landowners,
16 Oxford Land Group, Central Broome
17 Landowners, Deposit-Sanford, Strucker
18 Group, North Sanford Landowners, Apalachin
19 Landowners and Eastern Broome Landowners.
20 This would include my representing 25,000
21 property owners and their families in
22 nearly 200,000 acres of land throughout New
23 York State. Landowners have united for
24 multiple purposes. We are in the midst of

1 an opportunity we have never seen before in
2 New York State which has the lasting effect
3 on the issue of natural gas drilling.

4 In effect, these landowners are
5 willing to give their most prized
6 possession, their property, for the
7 exploration and harvesting of natural gas.
8 The formation of these coalitions was
9 designed for a purpose. Protection.

10 Over the last several months you have
11 heard from the vocal minority in this
12 action, the extreme environmentalist. I am
13 hear now representing, until now, the
14 silent majority. We all design protection
15 from the natural gas drilling companies in
16 every aspect of the process of this play.
17 We are property owners with all the same
18 concerns you have been presented with. We
19 are all concerned about the property and
20 the impact of this drilling for natural
21 gas. Our concerns vary from drinking
22 water, property invasion, noise control and
23 a variety of other issues that have been
24 presented to you over the last year -- that

1 have been presented to us over the last
2 year as we have met with these gas
3 companies. We are environmentalists with
4 all the right concerns. At the same time,
5 we are all willing to partner with the gas
6 companies to work harmoniously to achieve
7 the same financial benefits and maintain
8 environmental safety that will be realized
9 in this natural gas play.

10 Another of our concerns at the
11 forefront of the each coalition is timing.
12 We have all spent a substantial amount of
13 time out of our normal lives on a voluntary
14 basis to work on this issue. Our concern
15 is that the draft scoping for the
16 Supplemental GEIS is completed in a timely
17 manner.

18 Coalition members across the state
19 understand the importance of supplemental
20 GEIS being completed in an appropriate and
21 efficient manner. Our fear is that with
22 any state agency, this will be weighed down
23 by bureaucracy and restrictions, sending a
24 message to the gas companies that New York

1 State is not a place they would like to
2 conduct business. The economic benefits
3 realized on every level of government hang
4 in the balance to bring in natural gas
5 drilling to this state.

6 We are requesting a review to be
7 completed within the next several months,
8 as Governor Paterson has called for your
9 recommendation by April 2009. All
10 coalitions are supportive of the draft
11 scoping for the Supplemental GEIS as you
12 have presented. We will be responding in
13 the near future with written documentation
14 as to our support and areas of concern with
15 the Supplemental GEIS.

16 The one area of extreme concern is
17 the inclusion of the New York City
18 watershed within your report. We
19 understand that the DEC has to address a
20 statewide GEIS, however, it is our belief
21 that this was one area the GEIS will have a
22 devastating affect on Upstate New York's
23 natural gas drilling as proposed. We would
24 like to request to be removed from your

1 supplemental GEIS and be addressed as a
2 separate issue at a separate time.

3 In conclusion, we would like to thank
4 you for offering us the opportunity to
5 address you this evening. It is our hope
6 that by this representation you will have
7 the understanding that the silent majority
8 is present in support of the DEC's
9 outstanding record on gas drilling in New
10 York State. The time is here and now for
11 us to grab onto the issue of natural gas
12 drilling and profit, not only for
13 ourselves, but for New York State and all
14 its citizens as well. Thank you.

15 SPEAKER: I am a member of the
16 coalition and that man does not represent
17 me.

18 ALJ: Our next speakers at this point
19 and that will be Eric Lobe and Rema Lobe if
20 they're here. Are either of them here? If
21 not, we'll go to, and it's hard to read
22 this card, Cynthia. Cynthia Westermann.

23 SPEAKER: Thank you very much for
24 allowing us to address you this evening. I

1 am a member of a number of groups but I'm
2 speaking solely for myself in these
3 comments. I wanted to mention some things
4 that I think the scoping document should
5 address which have not been mentioned
6 tonight. Maybe a couple of them have.
7 First of all, is lighting --

8 ALJ: Slow down, we want to make sure
9 we got your comments down.

10 SPEAKER: One of the issues is
11 lighting, I'm very concerned about outdoor
12 lighting at night. You have visual impacts
13 in your document but you do not
14 particularly specify lighting. And I've
15 seen some gas wells in Tioga County and the
16 light pollution has been terrible. I
17 personally detest outdoor lighting. I live
18 in an area right near Copernicus
19 Observatory in Vestal and they are very
20 sensitive to outdoor lights. People have
21 said it will be all right after the well
22 has been drilled, but I'd like you to
23 address that and make sure the proper
24 lighting is used to minimize any kind of

1 light pollution, particularly in the areas
2 sensitive, such as Copernicus.

3 I want to particularly ask you to be
4 concerned about water in low flow times, in
5 drought times and make sure that there is
6 enough water for the residents here to use,
7 as well as the wildlife. Possibly they
8 cannot drill during those periods. I have
9 seen this river very low, I don't care what
10 this man just said about all the water
11 that's available, there's time when there's
12 not enough water available. And I think
13 the residents, the people who live here and
14 wildlife have preference way over these
15 drilling companies.

16 I had a couple of other things. One
17 is the radon issue. This area has a lot of
18 radon in it. A few years ago everybody was
19 all upset about it, I haven't seen any
20 mention how this drilling may affect radon,
21 it may not, but I'd like to see it looked
22 at.

23 I would like to see somebody look at
24 the, particularly the Binghamton-Johnson

1 Sewage Treatment Plant, I don't think that
2 plant would be able to take any of this
3 material. And I don't think that any well
4 should be drilled unless you're sure that
5 somebody can take the leftover material.

6 I also am worried about penalties for
7 them violating the laws or whatever you put
8 in the regulations you have and that, I
9 know in Colorado we were told that it's
10 just the cost of doing business to ignore
11 the regulations and that should not happen
12 here. I'd like to see the fines high
13 enough so that companies won't do that.

14 I find it a very important thing on
15 impact, you talk about community in your --
16 I think it's community in your document
17 with the extensive number of wells in the
18 larger pads, I think community is a very
19 important issue, particularly in the rural
20 areas. We will essentially be turning,
21 what a number of people here describe as a
22 beautiful, natural rural area into an
23 industrial zone if this is built up. And I
24 do not think, I think that should be looked

1 at in your document.

2 The other thing -- couple of other
3 things that I will submit written comments
4 but the other thing people have brought up
5 before is the staffing issue. Obviously,
6 the DEC is not going to get any more
7 inspectors, they're going to get less. I
8 think if you're going to permit this, don't
9 permit wells to be built unless you're sure
10 you have the inspectors to take care of it.
11 And also if people call up with complaints,
12 like this woman said, make sure somebody
13 can go out and look at it right away.

14 That's basically all I have for now.
15 Anything I missed, I'll submit in writing.

16 ALJ: Thank you. Next speaker will
17 be Steven Hertz followed by Clif Tamsell.
18 I don't see Steven Hertz, is he here? If
19 not, Mr. Tamsell, go ahead.

20 SPEAKER: Thank you. My name is Clif
21 Tamsell and I live in Norwich. I'm looking
22 at the gas drilling in a larger context. I
23 would just like to remind the DEC that the
24 statute relative to natural gas drilling

1 starts out indicating that the state shall
2 supervise the development, production and
3 utilization of the natural resources and
4 have no waste. And the legal definition of
5 having no waste is to extract as much of
6 the natural gas as is possible.

7 Now, I certainly don't want to see my
8 water polluted. I have a well. I don't
9 have a municipal system and so I would ask
10 that you follow your directives to also
11 protect my water. But the -- your task is
12 a monumental task. If you take the recent
13 estimates, including the estimate of North
14 Chenango County recently last week, that
15 the natural gas in the Marcellus that's
16 extractible is 50 billion cubic feet per
17 square mile. And you take the size of the
18 Marcellus in New York State which is 20 to
19 25,000 square miles, you come up with a
20 huge sum of money. It could be as much as
21 11 trillion dollars. So it's just a huge
22 number. The potential taxes that might
23 accrue to a local state government might be
24 as much as 11 trillion dollars. It's a

1 huge responsibility you have and it's a
2 huge asset. And it doesn't seem that,
3 given these type of revenues, that you
4 should have any problem having enough
5 inspectors to properly take care of any
6 environmental situation. These recent
7 estimates indicate that the Marcellus may
8 contain as much natural gas as the Saudi
9 Arabia oil reserves, so it's a huge, it's a
10 huge, huge thing.

11 And in a more -- speaking also in
12 terms of environmental policy, obviously
13 there hasn't been much said today here
14 about some other serious environmental
15 concerns. The current electrical
16 generation in the country consists of coal,
17 nuclear, natural gas, hydropower and then
18 there's renewables. We've been told for 20
19 years by the "environmentalists" that
20 renewable energy is going to be a huge
21 factor in electrical production. At this
22 point it's two to three percent in spite of
23 the billions and billions of dollars that
24 have been spent. It's not realistic to

1 expect that that's going to increase
2 significantly during our lifetime.

3 As recently as yesterday T. Boon
4 Pickens was on Meet the Press and he quoted
5 Al Gore as saying that natural gas had to
6 be a transitional bridge to protect the
7 environment, that it's cleaner than all the
8 other energy sources and it also will be a
9 substitute for the transportation for the
10 fuel, the oil that we use as transportation
11 and it would be an American fuel. It would
12 allow us to disengage from foreign oil.

13 The water issues that have been
14 raised are very easily solved. Of course
15 we don't want any gas company to take a
16 small stream and deplete that stream.
17 However, if you take the Susquehanna and
18 the Delaware flow, we have huge volumes of
19 water. Three seconds of -- excuse me, ten
20 seconds of flow at the mouth of the
21 Susquehanna is enough to frac a well in the
22 Marcellus. It's just a non-issue.

23 Now, there's -- I've heard nothing
24 about impoundments that are specifically

1 used by landowners or the gas company to
2 provide for fracing. I've heard nothing
3 about any coordination with the Army Core
4 of Engineers relative to the use of the
5 Whitney Point or East Sidney dams for use
6 of water. If you left the summer pool up a
7 couple of feet, in those reservoirs there'd
8 be plenty of water to frac all the wells
9 that will be drilled in the Marcellus for
10 any year.

11 One other thing that I did want to
12 mention about the taxes that might come
13 from the proceeds of the Marcellus is the
14 real property taxes. And I, after checking
15 the figures that the geologist have
16 indicated are probable, it looks like to me
17 in our county, that should those figures
18 come true, that real property taxes would
19 probably be reduced by 75 or 80 percent,
20 assuming constant spending as a result of
21 the ad valorem tax. And that tax is on the
22 wellhead and the bill goes to the gas
23 companies, so the individual owner's
24 assessments would not be raised.

1 One other thing, although I don't
2 live in Delaware County, it would seem to
3 me that if New York City wants to prohibit
4 drilling in the reservoir areas, that's a
5 taking. They can't take without just
6 compensation and the compensation they
7 would have to give to the landowners around
8 those Delaware impoundments would exceed
9 the ten billion that they're claiming that
10 they're going to have to spend on a
11 filtration plant.

12 Secondly, I would think that the time
13 frame with which you're planning on doing
14 this environmental impact study is too
15 expendable. Just today in the *Pittsburgh*
16 *Tribune* it was reported that because of the
17 process that the DEP in Pennsylvania is
18 taking, that two gas companies indicated
19 that they're going to leave a number of
20 rigs in other states, other than
21 Pennsylvania. The permitting process in
22 the natural gas states have been producing
23 a lot of natural gas for a long period of
24 time. In many states, you apply one day,

1 you get the permit, you can drill the next
2 day. At that time you get a nice big fat
3 manual that tells you what you can do and
4 what you can't do.

5 The air quality issue with the
6 Susquehanna River Basin Commission and the
7 Delaware River Basin Commission should be
8 to expedite this process. I understand
9 that New York State is a very bureaucratic
10 state and that the permitting process will
11 probably not be one day. But with the
12 Susquehanna River Basin Commission only
13 meeting once every three months and issuing
14 permits for the water, that's insane.
15 That's --

16 ALJ: I need you to wrap it up
17 because we have other speakers to be heard.

18 SPEAKER: Wrapped.

19 ALJ: Thank you very much. We're
20 going to take two more speakers and then
21 take a short five-minute break because
22 we've been on the record now for well over
23 two hours. But the next two people I would
24 hear from are Evan Romer and Barbara

1 Thomas .

2 SPEAKER: I thank you for this
3 opportunity to speak. This has been
4 mentioned a little bit but I wanted to say
5 some more about this. The supplemental
6 should also, should address the cumulative
7 impacts of drilling in the Marcellus Shale.
8 New York State law specifies the spacing
9 unit of 640 acres. That would mean about
10 700 wells in Broome County alone and
11 thousands of wells in the Southern Tier.

12 ALJ: Step up a little bit.

13 SPEAKER: That could mean about 700
14 wells in Broome County alone and thousands
15 of wells in the Southern Tier with in
16 filling, it could mean a lot more than 700
17 wells. I'm very concerned, I'm very upset
18 about the cumulative impact of that many
19 wells on this area that I love so much.
20 And I mean that cumulative impact in two
21 ways.

22 First, I'm concerned about the
23 cumulative impact of light pollution, air
24 pollution and noise. But second, even if

1 the DEC regulates all those issues well,
2 even if DEC regulates that well, I know an
3 earlier speaker said she didn't have
4 confidence that the DEC would come up with
5 good regulations and some of the audience
6 agreed, some disagreed. Even if the DEC
7 regulates all the issues that have been
8 talked about here tonight, I'm concerned
9 about the overall impact of the quality of
10 life here.

11 Each of these well caps is five acres
12 in size and requires infrastructure of
13 roads and pipelines. One of the biggest
14 assets in this area is the natural scenery,
15 the hills, the rivers, the streams. That's
16 why many of us value living here. If the
17 Supplement allows the density of drilling
18 that's being proposed, it will absolutely
19 destroy the quality of life in this area.
20 We'll be living in an industrial zone.

21 Recently in this area there was a
22 proposed senior community living proposed,
23 I think in Endwell, I think it was called
24 Shepard Home. That promoted an outcry and

1 extensive public hearings for people who
2 did not want to see that in their area.
3 Ultimately, that project was allowed to go.
4 But this was a senior citizen's home,
5 change that to a five acre drill pad,
6 multiply it by hundreds or thousands, and I
7 believe the impact will be devastating in
8 this area and I would urge the DEC to
9 seriously look at cumulative impacts when
10 they draft their Supplement.

11 One other separate point, the DEC
12 regulates fracking fluid currently and I
13 assume they will in the new Supplement. At
14 a public meeting the DEC held in Greene
15 last summer an audience member asked how
16 the DEC enforced that and the DEC said that
17 they receive samples. But they said they
18 get the samples provided by the drilling
19 company. And that's just -- you can't have
20 effective enforcement if you're relying on
21 the drilling company to provide you with
22 samples of fracking fluid samples. They
23 have to be, the samples have to be taken by
24 DEC inspectors, inspections have to be

1 unannounced, otherwise there's no
2 meaningful enforcement there. The contents
3 of fracing fluid and as we heard tonight,
4 there's a lot of concern about what's in
5 the fracing fluid.

6 ALJ: Thank you. Barbara Thomas, is
7 Barbara Thomas here? If not I will take
8 one other speaker before we break. James
9 Little.

10 SPEAKER: I'm a local
11 environmentalist speaking on my own behalf
12 but I do work with Broome County and the --
13 Coalition and working on the IBM chemical
14 spill. One of the common things that I
15 notice that people say, in the old days
16 people we didn't realize chemicals were
17 dangerous but now we do, so there's no
18 excuse now.

19 I was also interested in the former
20 comment about alternative energy because I
21 look around the triple cities, I don't see
22 too many solar collectors or windmills in
23 the area. But regardless of that, I think
24 the single most important issue that we can

1 address that would alleviate a lot of
2 fears, is to just use alternative fracking
3 materials, just simple solution, you know,
4 just New York needs to ban toxic chemicals
5 in gas drilling. Landowners, I think it
6 applies to the environmentalists as well as
7 the landowners, so that's my idea. Thank
8 you.

9 ALJ: Thank you very much. At this
10 point we're going to take a five-minute
11 break. To those who have to leave, I
12 appreciate your participation this evening.
13 To those who have not been heard from and
14 you have not filled out a public hearing
15 registration card, if there is something
16 that you want to speak to, there should be
17 time to hear from all the speakers.
18 Complete one of the registration cards and
19 get it back to us so that you can be heard
20 as soon as the remaining speakers that have
21 filled out the cards are heard. We'll take
22 a short break, I'd like to keep it to five
23 minutes. And to those sitting in the back,
24 can move up closer because there are seats

1 available here. Thank you.

2 (RECESS TAKEN.)

3 ALJ: It seems as those who wanted to
4 continue to participate are back in the
5 room, so at this point I'll call the
6 hearing back into session. I ask the
7 people who are here to take your seats and
8 give us your undivided attention. As I
9 indicated, there are about 20 speakers left
10 who have completed cards if you'd like to
11 be heard. We're going to move directly on
12 to those speakers and, again, if there's
13 something that's said you'd like to be
14 heard in response to and you haven't been
15 heard from, there's still an opportunity to
16 take one of the hearing registration cards
17 and we'll take your comments as well. I
18 think there will be enough time to hear
19 from everybody in the time that we have
20 left.

21 The next speaker that I'll recognize
22 is Glen Stein. Is Glen Stein here? I know
23 he was about five minutes ago. If Mr.
24 Stein is not here, the next speaker is

1 Caroline Kerr.

2 SPEAKER: I'm Caroline Kerr from
3 Willseyville and I have three points to
4 make.

5 The first is the Great Lakes Basin
6 needs permitting authority similar to that
7 of the Delaware and Susquehanna
8 Commissions. While water in the Great
9 Lakes Basin seems absolutely vast, only one
10 percent of the Great Lakes is renewed
11 annually. The 2007 drought negatively
12 affected seaway levels to the point where
13 cargo ship draft limits were reduced. The
14 Great Lakes in St. Lawrence is a vulnerable
15 system, whose water recharge needs to be
16 carefully monitored and regulated.

17 My second point is that the Marcellus
18 gas development potentially covers the
19 landscape with regularly placed wellheads.
20 Since gas development is essentially an
21 industrial park, when a community proposes
22 and industrial park, they layout roads,
23 power lines and other necessary
24 infrastructure. Many of the environmental

1 impacts of this gas play could be mitigated
2 by such advanced planning. I understand
3 the DEC is already considering creating a
4 grid of possible units to eliminate odd
5 acreage not fitting into any units. This
6 is a great start. I strongly urge the DEC
7 to take the leadership and work with other
8 agencies, such as the Public Service
9 Commission, to organize a proposed pipeline
10 system that optimally services that grid.
11 When outlined in the system, pipelines
12 should be located in existing rights-of-way
13 whenever possible. Power lines, railroads,
14 highways and pipelines already apply to our
15 landscape. Adding a pipeline to that
16 right-of-way may disrupt the current users
17 for the period of construction. However,
18 additional stripes cut through our
19 landscape, hamper farmers, birds,
20 endangered amphibians and nature seekers
21 forever. Planning those pipelines ahead of
22 time can minimize the redundancy due to
23 poor planning or the competition between
24 the companies themselves. I understand

1 that the gas companies do not like to share
2 pipelines. Such sharing should be
3 encouraged but companies could be free to
4 build their own pipeline in the
5 predetermined rights-of-way. Gas line
6 rights-of-way could also be used to lay
7 water lines to deliver water to wells
8 without the noise and pollution made by a
9 parade of water trucks.

10 My third point regards best practice
11 in drilling and fracing. It may well be
12 that the closed-loop system is currently
13 the best drilling practice from an
14 environmental point of view. However, this
15 is a rapidly developing industry and
16 technology. And to mandate a particular
17 technique disallows the use of better, but
18 yet unknown at this time, techniques. So I
19 urge you to include language that at least
20 encourages, if not mandates, the use of
21 technology that limits water use, protect
22 our groundwater and our otherwise best
23 environmental practice but don't specify
24 particular techniques. Thank you.

1 ALJ: Thank you very much. Next
2 speaker is Harry Carlson who will be
3 followed by Glenn Williams.

4 SPEAKER: My name is Harry Carlson.
5 I reside -- I have a residence on a small
6 parcel of land in Windsor, New York and I
7 may share future benefits from natural gas
8 exploration and recovery activities yet to
9 commence. I have no other alliances or
10 interests in the gas recovery industry that
11 I'm aware of, but I do want to say that two
12 members of my family are employees of New
13 York State DEC but not in the Division of
14 Mineral Resources.

15 While my mineral rights may prove
16 beneficial to me, there are other
17 fundamental interests of concern.

18 Number one is environmentally. I
19 noticed that I am 98 percent water and I
20 want to keep it that way. A foolhardy
21 tradeoff would be to seek and recover a
22 valuable resource such as natural gas and
23 denigrate or destroy another, especially
24 one so vital to all life such as water.

1 The existing surface and groundwater must
2 be protected both in quantity and quality.
3 Already proven industry practices and
4 procedures, including horizontal drilling
5 and hydro-fracturing techniques, appear
6 adequate to do so but reliably only with
7 appropriate, consistent regulation and
8 enforcement. Furthermore, the regulations
9 should be amenable to periodic revision to
10 accommodate needs as yet unknown.

11 Economic. If ever there was a time
12 when an economic boost was needed,
13 especially here in Upstate New York, it is
14 today. The positive and likely continuing
15 economic impact of the anticipated gas
16 recovery projects here in Upstate New York
17 and the Appalachian Region as a whole
18 appear to be huge. It comes at a time when
19 the region is desperate for it, not only
20 for the monetary gain but also for the gas
21 energy itself. Accordingly, governments at
22 every level, federal, state and local,
23 commissions such as the Susquehanna River
24 Basin Commission, the Delaware River Basin

1 Commission and agencies such as the EPA,
2 the New York City Department of
3 Environmental Protection, the New York
4 State Department of Health, the Department
5 of Public Service and the DEC should and
6 must work in concert to assure that
7 undesirable consequences are foreseen and
8 mitigated and that the economic benefits
9 achievable, are. While the scoping,
10 drafting and finalizing of the supplemental
11 GEIS must not be done hastily, it must be
12 done in better than just timely fashion.

13 Energy independence. I quote: "An
14 adequate supply of oil is essential to the
15 American standard of living. Oil in
16 increasing quantities will be required in
17 the future to meet the needs of our
18 expanding economy. A prime weapon of
19 victory in two world wars is a bulwark of
20 our national security." This quote is from
21 "Appendix II, A National Oil Policy for the
22 United States" in L.M. Fanning's book
23 Foreign Oil and the Free World, copyrighted
24 in 1954. Over half a century has gone by

1 and the nation still lacks an energy
2 policy. I believe that, the lack of a
3 national policy notwithstanding, by
4 developing the energy resource before us to
5 increase recovery of native energy, America
6 will be taking an incremental and important
7 step toward the essential goal of being
8 independent of foreign sources and the
9 whims, threats and dangers thereof.

10 And then specific to the Draft Scope
11 comments. Page 23, the penultimate
12 paragraph: The reference to SRBC limited
13 withdrawal rates seems to limit withdrawal
14 to 10 percent of Q7-10 at all seasons. It
15 seems reasonable to allow, even to promote,
16 greater withdrawal during periods of high
17 and normal flow. This would reduce the
18 need for withdrawal during periods of low
19 flow.

20 Page 27, drilling through aquifers:
21 It appears from the document, that adequate
22 requirements are in existing regulations to
23 protect groundwater sources, sources from
24 substances injected into and recovered from

1 the well. While these are paramount, what
2 of the sometimes disturbance of groundwater
3 supplying existing nearby water wells? The
4 mere act of drilling can cause such
5 effects.

6 Page 33, 4.6 road use: While the
7 SGEIS will address the potential mitigation
8 measures to lessen the impact of
9 short-term, high-volume truck traffic, it
10 does not appear to recognize the fact that
11 local roads are not structurally capable of
12 sustaining repeated heavy loads,
13 particularly during wet seasons. I believe
14 damage to local roadway infrastructures may
15 prove to be the most visible, annoying and
16 expensive impact on users and taxpayers.
17 Perhaps legislation is warranted to amend
18 the Highway Law to address the frequency of
19 heavily loaded, but otherwise legal, trucks
20 and equipment.

21 In conclusion, with resolution of the
22 above-mentioned issues, I believe the Draft
23 Scope to be comprehensive and appropriate
24 for preparing the DSGEIS. I ask that the

1 Department proceed with due diligence to
2 minimize delay so that the benefit of the
3 resource may be realized as soon as
4 possible. Thank you for this opportunity
5 to share my views.

6 ALJ: Thank you, Mr. Carlson. Next
7 speaker is Glenn Williams followed by
8 Annette Pfannensteel.

9 SPEAKER: Thanks for coming and
10 thanks for the opportunity to speak. I was
11 a member of a local gas coalition and I
12 resigned when I asked the attorney for the
13 coalition one night, what happens if they
14 drill on my property and they damage the
15 aquifer. He said, you will be insured. I
16 said, okay, what's the insurance provide?
17 He said, they will replace your water. I
18 said, how do they do that, with bottled
19 water? He said, maybe. Since then I've
20 found out that what they're doing in some
21 cases is bringing tank trucks full of water
22 and parking it outside your home.

23 It is my belief that this -- oh, I
24 know the other thing I wanted to say about

1 that was, I said, well, what happens to my
2 neighbors if the aquifer is damaged? He
3 said, that's their problem. That's when I
4 resigned.

5 I think this area will be devastated
6 by what is to come and I don't believe the
7 DEC, the state and certainly not the
8 federal government now will be able to do
9 anything about it. The landowners believe
10 they're going to get a lot of money,
11 upfront money and possibly royalties.
12 What's going to happen to their property
13 value? I think the upfront money won't
14 cover the loss of property value,
15 particularly if there's damage done.

16 If an aquifer is contaminated you can
17 sue your neighbor and there's some question
18 whether the gas companies really and truly
19 will protect you with the insurance that
20 they have. Someone mentioned earlier that
21 in Wyoming, since September of 2008, had
22 checked 220 wells, they found 88 were
23 contaminated. That's 40 percent. By my
24 figures I understand that one percent of

1 the chemicals -- one percent of the amount
2 of fluid put into a well, is chemicals. If
3 a well takes one to five million gallons to
4 frac, you're looking at 10,000 to 30,000
5 gallons of chemicals to go into each well.
6 That's a lot more than I thought.

7 The attorneys for the gas companies
8 tell you that you should have your well,
9 your well water tested before they drill
10 and after. I called Benchmark Analytics
11 today to find out what the charge was to
12 have your well tested for these chemicals.
13 If there are 247 chemicals, they charge \$35
14 per chemical, that amounts to \$8,645 to
15 have your well tested before and \$8,645 to
16 have it tested after from their charge.
17 Not only that, they don't tell you what
18 chemicals exist and they won't test, they
19 won't conduct tests until you tell them
20 what chemical that you're asking to be
21 tested. So you're at catch 22, there's not
22 much point in having your well tested
23 because you're not going to go anywhere
24 anyway and even if you could, you're going

1 to sue a company that has probably got a
2 billion dollars of net worth.

3 Finally, the burden of proof, if you
4 want to sue someone, the burden of proof
5 falls on the landowner, not on the company.
6 Many of the chemicals are volatile, so they
7 do enter the air. I wonder if DEC will
8 have air quality monitoring systems for
9 each well. DEC says there's been no
10 contamination of any well in the State of
11 New York to date. Well, I just heard of
12 one in Delaware today where they have a
13 tank truck of water parked outside the
14 farmer's house. North Brookfield had, I
15 understand, at least 14 wells that were
16 contaminated. There were wells
17 contaminated in Gibson, Pennsylvania. We
18 just heard at this meeting that there's at
19 least one more in Dimmock and I don't know
20 who else or where else, but I think there's
21 more, if that's what comes to my ears.

22 Further, the noise situation is
23 creating a problem called vibroacoustic
24 disease. It's not so bad, all it does is

1 puncture your ear drums. They're looking
2 at 100,000 wells in the Marcellus. Does
3 the DEC really intend to inspect every
4 well, every day? Thank you.

5 ALJ: Thank you. Next is Annette
6 Pfannensteel, followed by Wayne Lydecker.

7 SPEAKER: Thank you for the
8 opportunity to speak. After due diligence,
9 which means going to many meetings, to
10 presentations, reading and long reflection
11 about the proposed gas drilling, I've come
12 to the conclusion that this operation
13 cannot be done right because it's not the
14 right thing to do. And I'm thinking --
15 embracing creative thinking, we might want
16 to take into consideration a proposal
17 that's been submitted to Congress but has
18 not been in the media and the news. And
19 that proposal is in relation to giving
20 money to every adult person in the United
21 States for reducing production. And these
22 are the points of this proposal:

23 That there would be a moratorium on
24 new wells being drilled, whether it's oil

1 gas or whatever. And those in production,
2 the companies that have wells in production
3 would have to bid for permits to continue
4 to produce on the already existing wells.
5 The money that they bid on in these permits
6 would go electronically right into a trust
7 and that trust would then deliver the money
8 to every adult household or every adult
9 person in the United States. And the
10 estimate on the low end of how much an
11 adult would receive per month is \$1,000 to
12 \$1,500 a month. And then each year bidding
13 for the permit would get higher because
14 each year the oil and gas companies would
15 be required to do a two percent reduction
16 of the amount that they could produce, so
17 that in four years we wouldn't be producing
18 gas or fossil fuel at all and that would
19 have been encouraged. The alternative
20 energy should really be developed and we
21 could go on with that which really should
22 be done to begin with. So maybe we could
23 get behind that proposal so we could get
24 money for reducing production rather than

1 trying to do what we're trying to do in a
2 way that's not beneficial to our land or to
3 ourselves. Thank you.

4 ALJ: Thank you. Wayne Lydecker
5 followed by Madeline Cox. Wayne Lydecker
6 here? Apparently not. If he returns, he
7 can let me know and we'll hear from him but
8 the next speaker is Madeline Cox, Madeline
9 Cox? Joseph Hallick? Charles Caskey?
10 I'll keep going until we have a speaker
11 present. Charles Rowe? Looks like he's
12 here. As for the others, I'll call their
13 names just in case they might be in the
14 hall. Charles Rowe.

15 SPEAKER: Honorable members on the
16 New York State Department of Environmental
17 Conservation, we come here to give
18 testimony on issues of natural gas
19 development and drilling in Central New
20 York with the hope that it will lead to
21 improvements and changes in the policies of
22 government oversight of the natural gas and
23 oil industries that are operating in New
24 York State.

1 My name is Charles Rowe, I'm a fourth
2 generation dairy farmer in the Town of
3 Norwich, a rural township in Chenango
4 County. Our farm has been in the family
5 for over 100 years. We have a fifth
6 generation working with us now. As a
7 farmer, our environment is very dear to us
8 as we grow and live off the land.

9 I am here today as a landowner and
10 representing Chenango New York Landowner's
11 Coalition. We have over 135,000 acres with
12 over 200 members. We are farmers,
13 stonecutters, attorneys, bankers,
14 mechanics, school teachers, retirees,
15 hunters and weekend homeowners from all
16 walks of life, both democrats and
17 republicans. We are, however, united at
18 least in one goal. We are in favor of safe
19 drilling for natural gas with strong
20 oversight from the DEC.

21 I would like to point out our
22 coalition has drafted a strong
23 landowner-friendly lease which contains
24 numerous environmental protections. We

1 hope that the DEC can make such protections
2 uniform for all New York landowners and
3 provide vigorous inspection and enforcement
4 of regulations.

5 With the gas and oil drilling in New
6 York State, it can bring in great financial
7 help to our great state at a time of
8 financial crisis. Yes, the landowners will
9 be coming into large sums of money but the
10 upfront money, the government will get a
11 good share of it, 40 percent because it's
12 all capital gains. We as landowners would
13 have money to spend and invest in our
14 communities and families.

15 We have read the Draft Scope document
16 and feel that the DEC has taken an
17 intelligent, sensible and well-informed
18 approach to the supplemental GEIS. We have
19 confidence in the procedure and process and
20 hope it can bring a satisfactory final
21 version as soon as possible.

22 As the New York State Environmental
23 Conservation Law Section 23-0301 states, it
24 is in the public interest to authorize and

1 provide for the operation and development
2 of oil and gas properties in order to
3 accomplish three goals. A greater ultimate
4 recovery of oil and gas, the protection of
5 the correlative rights of all landowners
6 and the right of all persons, including
7 landowners and lastly, the full protection
8 of the general public.

9 We feel confident the DEC will
10 protect the landowners, as well as the
11 general public. Our only additional
12 comments are:

13 Drilling sites are construction sites
14 with people running them. Accidents can
15 happen and will happen, so let's reduce the
16 chance. We are in favor of closed-loop
17 drilling. If it is possible to keep the
18 fracing water completely contained
19 throughout the process so that it never
20 sees the light of day or is exposed to air.
21 We will all be safer. Some of the benefits
22 of it is:

23 43 percent savings in drilling fluid
24 costs. 33 percent fewer days to drill to

1 complete the depth. Up to 39 percent
2 improvement in the rate of penetration.
3 Reduce surface disturbance. Reduce
4 drilling mud and wastes. Reduce total
5 cost, considering it reduces cost for drill
6 site installation, fluid hauling and
7 disposal, dirt work and surface damage
8 payments. It reduces the potential for
9 environmental impact to the surface and
10 groundwater.

11 We would like to see some regulations
12 requiring that gas companies keep the wells
13 in the horizontal wellbores more closely
14 centered in each unit rather than placing
15 it off to one side or a corner as it has
16 happened on several wells in Chenango
17 County recently. We feel that such well
18 siting can adversely impact neighboring
19 properties not in the unit and also leads
20 to less optimum extraction of gas from the
21 unit.

22 We hope the state government uses
23 some of the increased tax revenue that will
24 flow from the gas drilling to subsidize

1 increase DEC staffing. We feel that a
2 strong DEC will be a key to safe drilling
3 over the coming decades. We would support
4 an increase in well permits to fund more
5 DEC staff, as well as a severance tax on
6 extracted gases equal to that imposed by
7 other states which could not support only
8 the DEC, but all aspects of the New York
9 State budget.

10 We believe that gas drilling has many
11 benefits for the State of New York and its
12 risks are small and all within our power to
13 manage sensibly. Respectfully submitted by
14 Charles Rowe. Thank you.

15 ALJ: Next speaker would be Todd
16 Barnes, followed by Ken Feycinko.

17 SPEAKER: Hi, my name is Todd Barnes,
18 I'm a business owner in Chenango County in
19 Norwich.

20 Two major issues pending that affect
21 all landowners here in Central New York.
22 You have NYRI, you have natural gas. With
23 these two situations, NYRI is a 190 mile
24 corridor that comes down through Central

1 New York to New York City. It requires a
2 500 foot path all the way through. This
3 takes out a lot of private homes, forests,
4 businesses, farmers, farmland, water that
5 they have to cross, but it's -- as I've
6 listened to the radiation, everybody has
7 described that comes out of the ground,
8 they're looking to put this electricity
9 down through everybody's land. When these
10 businesses, farmers are taken out of the
11 map, everybody that is dead set against it
12 is going to be learning that this corridor,
13 New York City does need electric. Whether
14 we want to provide it or not, it's coming
15 through one form to another.

16 The natural gas infrastructure has
17 already been run from Deposit to the city
18 with holding tax. I would rather benefit
19 from the natural gas from this area so that
20 the schools -- schools and businesses in
21 Upstate New York State will eventually
22 prosper and get the revenues from the taxes
23 that can be generated from this.

24 Natural gas is a more clean source of

1 energy which will impact our pollution
2 problems because natural gas is cleaner.
3 If we can do this instead of having
4 electric lines going down through here and
5 staying above ground where we can not fight
6 it, we are going to have bigger problems
7 than what the DEC can do right now by
8 pushing DSGEIS through with all of the
9 regulations and all of the concerns that
10 people have.

11 I am for the drilling as a business
12 owner and as a landowner. As a landowner
13 myself, I have over 400 acres. I came from
14 the ground up, I had nothing to start with
15 and I have built my business. When landmen
16 come around and asked me what I would like
17 to do, I kept turning them down looking for
18 a better situation.

19 I am part of the Central New York
20 Landowner's Coalition Group. These groups
21 were all formed to help turn around and
22 make sure that if they're going to do it,
23 it needs to be done in the right way. And
24 I hope that our lands are protected as well

1 as the environmental issues that the DEC
2 can push through DSGEIS. Thank you.

3 ALJ: Thank you very much. Ken
4 Feycinko?

5 SPEAKER: Good evening. Thanks for
6 hearing me out. I'd like to say that I am
7 not an environmentalist, I am for the
8 drilling. However, let's make sure it's
9 done in a safe equitable and prosperous
10 manner so we can pass on our land to our
11 kids in the future.

12 We need this money. Our country
13 needs this opportunity to get away from
14 foreign oil. We need energy independence.
15 However, with the ear of the DEC I would
16 like to urge a little more commonsense on
17 what's going on.

18 The 2005 Safe Water Drinking Act
19 signed by President Bush, endorsed by
20 Cheney and probably, you know, whatever
21 other big business, omits the fact that
22 hydro-fracturing is not covered under this
23 law. I would ask that the DEC step up to
24 the plate and have some -- the authority to

1 make the well drillers responsible, so much
2 so that if there is an incident or an
3 occurrence, that the DEC can revoke the
4 company's ability to further -- to apply
5 for more permits. Thank you.

6 ALJ: Thank you. Is Kelly Clarke
7 here? Followed by Diane Lisek.

8 SPEAKER: I want to thank you for the
9 opportunity to speak with you all tonight.
10 I've heard arguments saying that we take
11 too long to move on with the drilling.
12 That some of the companies are maybe
13 pulling out from other areas. And that may
14 be the time for a deregulation or ease of
15 regulation and I want to remind people that
16 deregulation is kind of what got us into a
17 lot of problems already with our economy
18 and I wouldn't recommend speeding up.
19 Actually, I would recommend being more
20 cautious.

21 During these hard times some of my
22 neighbors are considering allowing the gas
23 and oil companies to drill on their land
24 for monetary reasons. And I can imagine

1 that the state and local governments may be
2 tempted by this possible revenue as well.
3 I heard the figure of 18 million for every
4 300 wells drilled but is that enough? I
5 mean, what's the real cost here?

6 What is the value, the cost of
7 protecting our health. I have a little
8 boy, six years old, I want to make sure I
9 can protect his health. I'm a landowner, I
10 live in the Town of Binghamton. I want to
11 make sure that I can continue to live here
12 in this beautiful safe place where my water
13 is good. You know, I want to make sure I
14 can continue to have a safe place to raise
15 my little boy, where I don't have to worry
16 about the water being polluted or the air
17 being polluted or the soil being polluted.

18 So I don't believe we should rush in
19 for the gold, so to speak. I think all the
20 factors that have been talked about tonight
21 have to be explored more fully. Again,
22 I've lived here all my life, except for a
23 brief time when I went away to college and
24 I've come back because it is such a

1 beautiful place. It's a very good
2 community and a strong community and I
3 appreciate it.

4 We all have a slight difference of
5 opinion, perhaps on how we should move
6 forward, but I think everyone is in
7 agreement that we do need to be very
8 cautious and protected. We got to make
9 sure we protect our homes, our land here.
10 This is a very beautiful place and I don't
11 want to see it given up to the interest of
12 the oil and gas companies. I want to make
13 sure that the residents count first. Thank
14 you.

15 ALJ: Thank you. Diane Lisek? Is
16 she here? Karen Glouber, is she here?
17 Jilda Rush? And then Stanley Gluck. And
18 those will be the last two cards I have
19 completed. If there's someone here who
20 hasn't been heard and I haven't called your
21 name, you can still fill out a card and
22 bring it up to me, we'll take your comments
23 before we close out the record.

24 SPEAKER: I have quite a bit here so

1 please bear with me. I hope I can bear
2 with myself as a matter of fact.

3 Issue number one. You've heard about
4 this quite a bit. The need for
5 professionally trained inspectors. I
6 worked for New York State Department of
7 Transportation for eight years in the
8 bridge design unit and the Oregon
9 Department of Transportation for 16 years
10 as a construction inspector and materials
11 tester. I will tell you from first-hand
12 experience that a project as simple as a
13 state highway asphalt paving project
14 required an onsite daily field inspector
15 and an onsite daily ODOT asphalt materials
16 inspector testing the asphalt for such
17 things as moisture content, percentage of
18 asphalt in the mix, aggregate gradation
19 sieve analysis, et cetera. I had an
20 extremely detailed position description for
21 a Canadian oil and gas drilling inspector
22 in British Columbia, Canada. The job
23 description serves to illustrate the
24 importance the Canadian Government places

1 on field inspections. And the degree of
2 detail contained in the job description,
3 shows that gas drilling is not a simple
4 process, nor should it be treated as such.

5 I am extremely grateful to Governor
6 Paterson and his close advisors to realize
7 a critical need for gas inspectors and
8 approving a moratorium on all gas drilling
9 until the state can provide a means of
10 enforcing gas regulations. But recognizing
11 the need for finding inspectors and finding
12 the funding for these positions are two
13 different things, especially with the
14 current economy. Thus, if the DEC cannot
15 currently fund inspector positions, the gas
16 drilling should only advance as fast as the
17 current DEC inspectors can monitor them.

18 Issue two. The need for contract
19 plans and specifications to be prepared by
20 the gas drilling companies themselves with
21 submittal to DEC for review and approval.

22 I attended a meeting at the
23 Binghamton Public Library conducted by the
24 Independent Oil and Gas Association. I

1 expressed a need for contract plans and
2 specs and John Holko insisted that the gas
3 drillers already provide such plans to DEC.
4 The next day I called Linda Collart of the
5 DEC and conveyed what Mr. Holko had said.
6 The only thing she knew of that would be a
7 detailed drawing of any sort consisted of
8 one sheet. I asked her to send me a copy
9 of one of these sheets for a recent DEC
10 approved gas well. This sheet shows the
11 geological strata, depths, hole and casing
12 design, et cetera. But this one sheet is a
13 far cry from what I am referring to and
14 accustomed to seeing on a Department of
15 Transportation project.

16 While working with New York State DOT
17 and Oregon DOT for 24 years, I was involved
18 with preparing preliminary bridge plans and
19 specs for interstate bridges on 110 miles
20 of I88. That was a long time ago. I also
21 prepared preliminary plans for many Oregon
22 highway construction projects. Projects as
23 simple as asphalt resurfacing projects, all
24 the way up to modernization projects

1 involving widening two-lane highways to
2 four lanes. These plans were extensive in
3 nature, covering every known aspect of
4 construction and typically entailed 50 or
5 more contract sheets with accompanying
6 specification of 100 more sheets. Thus, I
7 don't see a gas drilling project as
8 requiring anything less since the impacts
9 can be every bit as far reaching.

10 To further drive this point home, I
11 will explain a project that I had first
12 knowledge of that was in the hands of our
13 very own New York State DEC for review.

14 These were contract plans, 24 inches
15 by 36 inch size, drawn up by Keystone
16 Engineers for a large pond my neighbor,
17 located on the hill directly above me, was
18 proposing to build. I became very
19 concerned of the location of this proposed
20 pond and the fact that no one was going to
21 be on site as an inspector. Thus, I was
22 successful in having DEC deny the permit
23 for this pond. Thank you very much.

24 But the main reason I bring this up

1 is to illustrate that the division of DEC
2 requires rather extensive plans and specs
3 for a pond when it reaches a certain size
4 and volume. And I might add that a pond
5 does not pose any risk to underground water
6 tables, nor does it contain any toxic
7 chemicals to pollute water supplies. Thus,
8 why isn't this requirement for plans and
9 specs carried over to the gas drilling
10 operations. The plans and specs would
11 succeed in one huge accomplishment, that
12 being there would be no mystery and no
13 doubt about what the gas companies might be
14 up to. Their procedures would have to be
15 clearly explained with accompanying
16 detailed drawings and construction notes
17 showing every aspect of their operation.

18 You might be thinking, is there a
19 better gas drilling operation that would
20 require a detailed drawing plan with
21 accompanying specs? I will give you just
22 one example. Environmentalist Bob Williams
23 gave a presentation at the coalition
24 meeting in Harpursville, wherein he showed

1 a picture of a gas drilling pad. The pad
2 was quite large and required that the earth
3 be leveled with a berm constructed around
4 the perimeter. This picture caused me to
5 immediately think of my neighbor's pond
6 plans and specs. The gas drilling berm was
7 very much like the pond berm. The pond
8 berm specs stated that the embankment is to
9 be constructed in a maximum eight-inch
10 thick layers running continuous for the
11 entire length of the fill, with each layer
12 being compacted prior to placement of the
13 next layer. And the fill is to have at
14 least 30 percent passing the number 200
15 sieve. Now, do you actually think that the
16 drilling pad berm was constructed in this
17 manner? I would bet the drill pad berm was
18 constructed by a dozer pushing dirt up into
19 an unkempt pile that was never even
20 compacted.

21 Now, what was the pond berm serving
22 to contain? Yup, pure water. Now, what is
23 the drill pad berm supposed to contain?
24 You got it, impure hazardous materials.

1 Thus, this drill pad and waste pits need
2 the same careful plan drawings and specs as
3 DEC requires for a fairly innocuous pond
4 berm. And this is just one example of
5 drilling details that need to be spelled
6 out in a drawing with construction notes
7 and specs.

8 Issue three. DEC needs to research
9 gas well cement compositions and cementing
10 procedures and hire an outside professional
11 in this field such as Schlumberger to
12 review gas drilling applications submitted
13 to DEC for approval since this is such a
14 complicated and critical aspect of gas
15 drilling.

16 In the above mentioned example of a
17 current DEC approved gas well that Linda
18 Collart sent me, I noticed that Class A
19 cement was being used. I called her to ask
20 her if this was regular Portland Cement and
21 she said yes. Since I used to be an
22 asphalt concrete materials tester for
23 Oregon DOT, I became concerned over the
24 rigidity of Portland Cement and the extreme

1 conditions deep gas wellbore holes and
2 drilling operations could exert on this
3 concrete after the casing was cemented.
4 Thus, I researched this topic and present
5 the following findings:

6 Proper cementing is critical for the
7 protection of subsurface aquifers and the
8 prevention of gas leaking into zones that
9 would otherwise not be gas bearing. Tubing
10 and casing leaks, poor drilling and
11 displacement practices, improper cement
12 selection and design may all be factors in
13 the development of gas leaks. Thus, the
14 primary gas drilling contractor frequently
15 subcontracts this aspect of gas drilling to
16 a company that exclusively performs
17 cementing operation. DEC personnel may
18 have heard of Schlumberger since they are
19 internationally renowned experts in this
20 field. I contacted them for help via
21 e-mail and they responded by saying: "If
22 the DEC is interested in soliciting our
23 help, we would be willing to participate."
24 Professionals in the oil and gas industry

1 admit that they are still in the process of
2 perfecting cements and cementing
3 techniques. Schlumberger says: "Much work
4 remains to be done in simulating downhole
5 conditions and developing new cement
6 technologies and compositions for thermal
7 applications in high-pressure conditions."

8 Halliburton offers the following:

9 "Wellbores exist in extremely dynamic
10 environments. Therefore, a cement sheath
11 must be able to perform as intended over
12 time. In cementing a well, the primary
13 concern is to prevent fluids from migrating
14 into the annulus. As a well ages, the
15 annular seal may become compromised as a
16 result of stresses brought on by
17 temperature and pressure cycling that occur
18 as the well is operated. By industry
19 convention and tradition, the effect of
20 stresses on the cement sheath's mechanical
21 properties are not ordinarily assessed
22 during the design and construction phase of
23 the well."

24 The following are excerpts from a

1 paper titled: *From Mud to Cement-Building*
2 *Gas Wells*, dated Autumn 2003. "This study
3 serves to illustrate the complexity of the
4 cementing process. If the experts in this
5 field attest to the complexity of this
6 aspect of drilling, I think New York State
7 DEC should pay more attention to cement
8 designs and cementing procedures." This is
9 a quote from the paper: "Since the
10 earliest gas wells, uncontrolled migration
11 of hydrocarbons to the surface has
12 challenged the oil and gas industry. Gas
13 migration, also called annular flow, can
14 lead to sustained casing pressure,
15 sometimes called sustained annular
16 pressure.

17 By the time a well is fifteen years
18 old, there is a 50 percent probability that
19 it will have measurable sustained casing
20 pressure in one or more of its casing
21 annuli. However, SCP may be present in
22 wells of any age. Cement damage can occur
23 long after the well construction process.
24 Even a flawless primary cement job can be

1 damaged by rig operations or well
2 activities occurring after the cement has
3 set. Changing stresses in the wellbore may
4 cause microannuli, stress cracks or both,
5 leading to SCP. The mechanical properties
6 of the casing and the cement vary
7 significantly. Consequently, they do not
8 behave in a uniform manner when exposed to
9 changes in temperature and pressure. As
10 the casing and cement expand and contract,
11 the bond between the cement sheath and the
12 casing may fail.

13 As the borehole reaches deeper into
14 the earth, previously isolated layers of
15 formation are exposed to one another with
16 the borehole as the conductive path.
17 Isolating these layers or establishing
18 zonal isolation, is key to minimizing the
19 migration of formation fluids between zones
20 or to the surface where SCP would develop.

21 Crucial to this process are borehole
22 condition, effective mud removal and
23 cement-system design for placement,
24 durability and adaptability to the well

1 life cycle. Wellbore condition depends on
2 many factors including rock type, formation
3 pressures," blah, blah, blah. "The
4 ultimate condition of the borehole is often
5 determined early in the drilling process as
6 drilling mud interacts with newly exposed
7 formation. If they are mismatched, the
8 interaction of the drilling mud with
9 formation clays can have serious
10 detrimental effects. Once a well is
11 drilled, displacement cementing and
12 ultimately zonal isolation efficiency are
13 dependent on a stable borehole. Drilling
14 fluid engineers and related technical
15 specialists have applied various techniques
16 to investigate rock response to drilling
17 fluid chemistry under simulated downhole
18 conditions. Mud companies have created
19 high-performance water-base muds that
20 incorporate various polymers, glycols,
21 silicates or combination thereof for clay
22 control. Like the fluids themselves,
23 drilling fluid hydraulics play a
24 fundamental role in constructing a quality

1 borehole. Balance must be maintained
2 between fluid density, equivalent
3 circulating density and borehole cleaning.
4 If the static or dynamic fluid density is
5 too high, loss of circulation may occur.
6 Conversely, if it's too low, shales and
7 formation fluids may flow into the borehole
8 or, in the worst case, well control may be
9 lost altogether. Improper control of
10 density and borehole hydraulics can lead to
11 poor displacement and failure to achieve
12 isolation. Detailed engineering analysis
13 is required to obtain acceptable outcomes.

14 Proper mud" -- I'm trying illustrate
15 how complicated this is. "Proper mud
16 selection and careful management of
17 drilling practices generally produce a
18 quality borehole that is near-gauge and
19 stable. To establish zonal isolation with
20 cement, the drilling fluid must first be
21 effectively removed from the borehole. Mud
22 removal depends on many interdependent
23 factors. Tubular geometry, downhole
24 conditions, borehole characteristics and

1 hole geometry play major roles in
2 successful mud removal. Optimal fluid
3 displacement requires a clear understanding
4 of each variable as well as inherent
5 interdependencies among variables. The
6 availability of computer technology has
7 significantly advanced the way drillers
8 approach wellbore displacement. Fluids can
9 be built, complex interactions predicted
10 and displacement simulated on the computer
11 screen rather than at the well site.
12 Special materials are required to give the
13 cement flexibility. Sealing an annular
14 space against gas migration can be more
15 difficult in gas wells than in oil wells.
16 Wellbore construction, particularly in the
17 presence of gas bearing formations,
18 requires that borehole, drilling fluid,
19 spacer and cement designs and displacement
20 techniques be dealt with as a series of
21 interdependent systems, each playing an
22 equally important role. Often, the
23 relationships among these systems is
24 overlooked, or the very least, poorly

1 appreciated. Preventing gas migration and
2 SCP has been helped by recent developments
3 in cementing technology that offers
4 significant advantages in durability and
5 adaption to changing wellbore conditions.
6 Cement properties have traditionally been
7 designed for optimal placement and strength
8 development rather than
9 long-term-post-setting performance. The
10 rapid development of high
11 cement-compressive strength after placement
12 was generally considered adequate enough
13 for most wellbore conditions. Today,
14 operators and service companies realize
15 that the emphasis on strength at the
16 expense of durability has often led to the
17 development of sustained casing pressure
18 and reduced well productivity. Cement
19 particle characteristics and size
20 distribution can contribute significantly
21 to both the resistance to gas influx and
22 maintenance of a sustainable hydraulic
23 seal, particularly in wellbores subjected
24 to pressure and temperature cycling.

1 Flexstone advanced flexible cement
2 technology is one of several solutions that
3 effectively address cement flexibility and
4 durability. Conventional Portland cements
5 are known to shrink during setting. In
6 contrast, Flexstone slurries can be
7 designed to expand, further tightening the
8 hydraulic seal and helping to compensate
9 for variations in borehole or casing
10 conditions. This capability helps avoid
11 microannuli development. By adjusting
12 specific additive characteristics and by
13 blending the cement slurry with an
14 engineered particle size distribution, a
15 lowering of Young's modulus of elasticity
16 in the cement can be achieved. Annular
17 cement can then flex in unison with the
18 casing, rather than failing from tensile
19 stresses. Thank you.

20 ALJ: Thank you very much. Last card
21 I have -- Diane Lisek? Yes, we'll hear
22 from you next.

23 SPEAKER: Hello, I know you're tired.
24 I'm here because if you want to know where

1 you're going, you have to know where you've
2 been. We don't allow children to sign
3 contracts because they don't know what the
4 actions will be. I think we feel almost
5 like children because we don't know what
6 one is getting into. And to know, I think
7 that everyone needs to know and reach out
8 to other communities that have gone through
9 this and see what they've really gone
10 through.

11 I know where we're going because I
12 know where we've been. When you talk about
13 economic loss, we had -- a lot of people
14 don't remember that our own state building
15 was contaminated. To clean up the state
16 building cost more than it did to build.
17 That's just a little thing to think about
18 when things go wrong. You don't need to be
19 a mathematician to know -- or even go to
20 Vegas to know that snake eyes always come
21 up. There's always problems that will
22 arise. Good intentioned or not. You have
23 to ask yourself when something really
24 happens, what is done. We've had a toxic

1 plume in Endicott. And I can tell you as a
2 resident, we've had all kinds of people who
3 are running for office, they come here,
4 they talk, they show up and they run away.
5 They solve nothing. Half the time we don't
6 really get what's going on. And people
7 just drag their feet and shift the blame of
8 liability. Nobody wants to take it there.
9 I don't believe that the toxic plume has
10 been fixed in Endicott. And it's a small
11 little dot on the map. When you look at
12 the dots that will be in the state. If you
13 can't fix something that's small, how do
14 you fix something when it's so large and
15 surrounding. The truth is, many things
16 can't be fixed. It's like milk when it
17 spoils, it never goes back again. And in
18 life we have to look to what gets spoiled
19 that can't be fixed and we have to ask
20 ourselves is, when we're talking about a
21 precious resource, drinking water and
22 breathing is as precious as we have in the
23 world. And you can't say that you're going
24 to make a tradeoff that will ruin something

1 without asking what happens when it rains.
2 Everybody is happy with sunshine but when
3 it rains, who's going to provide the
4 umbrella? Who takes liability? Who will
5 address things? When we have a small
6 little dot that can't get fixed, we can't
7 take the red out of the dot in Endicott.
8 And I don't understand why it hasn't
9 happened quicker. And you'll see how
10 people drag their feet and how long it
11 takes. And like I say, this is something
12 you have to think about because people can
13 be very well intentioned but you and I all
14 know, we have all had human failure in
15 life. It's just a certainty, with good
16 intentions, accidents happen. Many people
17 go out on the road every day, they don't
18 expect it to happen but it does. Someone
19 has to be the insurance policy for when
20 things go bad. And I hope that people will
21 give this a very long look and you'll have
22 to look into your soul of what you pass on.

23 I know what economic gain means
24 because I lost a quarter of a million

1 dollars and I had -- I had the assurances
2 of moving from a home. For the last five
3 years I entered into three contracts for a
4 home, lost all three because I was promised
5 that my house would be taken. And you know
6 what they were going to put there, it was
7 nothing toxic, it was a Walgreens. A
8 Walgreens that you can go to when you need
9 medicine in the middle of the night, when
10 there's snow other places and you have
11 nothing open. People did not want a
12 Walgreens. I lost a quarter of a million
13 dollars but that's okay. So a lot of
14 people are going to say there's going to be
15 economic loss. But people didn't want a
16 Walgreens and they want this and they don't
17 ask themselves more questions in their
18 heart? I can't believe they won't. I'm
19 not saying I'm against anything economic, I
20 tell you I've been there, I wanted money, I
21 wanted and I've needed money more than most
22 people do. But you need to think and
23 people have to do more than make a promise
24 that they know that they may break. So I

1 hope people think long and hard.

2 My husband works in the toxic plume.
3 He works there every day. He's had to go
4 underground and go through it. They know
5 it's there. They don't tell workers what's
6 there, they tell them to shut their mouth
7 or lose their job. I can tell you this for
8 certain. So there will be people in the
9 surrounding area that may have economic
10 gain but they don't know what they pass on
11 to their neighbor.

12 I'm only going to talk about water
13 for a second more. You have to know where
14 you're going, you have to look to where
15 you've been. I've been through drought. I
16 have not been able to -- I have voluntarily
17 not watered my lawn in the history of this
18 county. Have not taken baths, have not run
19 my clothes, I have volunteered doing that
20 because I wanted to make sure my neighbor
21 would have the lifesaving water if he had a
22 fire, that he could put it out. I
23 volunteered it, we were asked to do it,
24 we've been asked to do it for drought.

1 Will these people give up their water for
2 my neighbor or me if I have a fire and stop
3 in time of drought? I need to know that.
4 I can't think it will happen, I need to
5 know.

6 When we have an election every four
7 years or two years, we get to rescind the
8 policy that we've made. Even if we didn't
9 vote for it, we get to make the choice.
10 There was no more -- on this, I don't think
11 there's going to be a voice. You really
12 don't have one because you're not voting
13 for this. We have propositions that were
14 just passed or voted down. Everybody got
15 to vote for them. We don't have a
16 proposition here in Broome County.
17 Nobody's put it on the ballot box for
18 anyone. I didn't get to vote for it. Will
19 this happen? I would like know from the
20 people if it will. If that is what
21 democracy is, will we get a vote? When we
22 vote in an election, even if we don't like
23 what goes on, we'll stand by and say, we'll
24 support it and see what happens. But in an

1 election year, come time if we don't like
2 where we've gone, if we think we're sitting
3 on the Titanic, we can bail. What will
4 happen if we want to bail? What are your
5 rights to bail? And I would like to know
6 that because I don't want to be -- have New
7 York State just have a little toxic plume
8 in Endicott. I don't want to be the Love
9 Canal of the state. I don't want New York
10 State to become a Love Canal and people
11 need to look before they do. And they have
12 to have accountability and they have to
13 bear liability because we're never given
14 it. And in truth, we're not always given
15 truth. When you want to seek truth, you
16 have to look very hard for it in this life.

17 I know that my husband is told he can
18 drink the water where he works. He cannot
19 drink the water. Not one person who is in
20 a position of authority drinks out of the
21 water fountains. Not one of them. And I
22 know on Taft Avenue, I know somebody who
23 works there, the state has told people who
24 work at the Developmental Center, they're

1 not to make the food for the people who are
2 there, they are written up. They cannot
3 use the water on Taft which is right above
4 where my husband works. Why? What does
5 the state know that they don't tell? I
6 would like to know truth and I hope people
7 ask for it.

8 Some people play a song that's silent
9 inside of them but you cannot be silent.
10 This is something you may rue the day that
11 you have not spoken on or sought the truth
12 on and I hope we do get truth.

13 ALJ: We have three more cards. The
14 next speaker is Stanley Gluck. After him,
15 Mark Lippolis and then Barbara Abbott-King.
16 If there is anyone else who wants to be
17 heard, you need to complete a card and get
18 it up to me. Otherwise, these are going to
19 be our last few speakers. Stanley Gluck.

20 SPEAKER: I asked a little while ago
21 from the gentleman here, who would be
22 making the final decision on what's going
23 to happen in our area and he -- it is none
24 of the people that we see before us -- In

1 fact, the person who will be making the
2 decision, I was told by one of the DEC
3 people is Peter Grannis. Peter Grannis is
4 formerly a state legislator, who I guess
5 has been appointed to be commissioner. I
6 have no idea whether this gentleman, Peter
7 Grannis has any credentials to make the
8 kind of decision. And I think we need to
9 know something about that. How is he going
10 to decide these things? So it's Peter
11 Grannis and from what I understand, from
12 what they told me, the Governor doesn't
13 overrule him, he'll make the decisions as
14 commissioner of DEC. My own selection for
15 commissioner and DEC should be the lady two
16 people ago, the lady who was working for
17 the highway department, for the DOT because
18 I think she -- (applause) in this matter.

19 Anyhow, a little example of when I --
20 the real world when I got out of the
21 service in '57, my first job was as a
22 testing technician for a lab that tested
23 construction materials. My rather simple
24 job was to go out on construction sites and

1 bringing cement samples back, concrete
2 samples back in these cylinders, which
3 meant we probably had to assume were
4 paraffin-lined cylinders. And we would
5 bring them to the lab to cure and then
6 break them at certain points with a machine
7 that calibrated the strength of these
8 cylinders. And this was in San Antonio,
9 Texas. If Edison High School was still
10 standing on this site, because I brought
11 back from those countries cylinders, we
12 tested them as we should and then when we
13 ran the compression on them, it didn't need
14 any calibration, so we didn't know what
15 they would break at because it didn't go
16 high enough to even register. And not much
17 was done about the floors in that high
18 school, that public high school that they
19 put in. So that's the real world of
20 control to these things.

21 I'm a property owner too between my
22 partner and myself, we have about 50 acres
23 or so but, you know, I wondered to myself,
24 there's, down in the core of the earth

1 there's iron, the earth has an iron core.
2 That's what I've been told, I'm not an
3 expert, that's what I've been told. Now,
4 do I own some of that iron that's down
5 there, whatever, 10,000 miles in the earth,
6 5,000 miles to the center of th earth, I
7 don't know. But it seems to me that we
8 have a natural resource that we're being
9 told is so valuable, so tremendously
10 valuable.

11 I was, a number of years ago a taxi
12 driver, a taxi operator in Syracuse, New
13 York. We, myself and 30 others had rights
14 to the airport which we bought, bought from
15 each other. And the law of that city said
16 that these were saleable rights, just like
17 in New York City with their medallions.
18 The one year they came along and said,
19 they're no longer ours, a friend of the
20 mayor was going to get them all. That was
21 in 1986 or '87. We were told that the city
22 had the right to take things from us on the
23 basis of eminent domain. And these rights
24 that all of us own and bought were given

1 free to someone else and we went to
2 court -- and through the courts we lost.
3 No reason given to us why we lost, we just
4 lost. The right to private property was
5 abolished, I guess by the City of Syracuse.

6 The reason I bring that up is, here
7 we have underneath our soil is a huge
8 natural resource. It's right here
9 underneath us here. They'll be going
10 through Broome County, through the Southern
11 Tier, through Pennsylvania. This is a
12 natural resource that some of us are,
13 happen to be property owners. But it seems
14 to me that if they thought it was logical
15 to take simple taxi rights from us, because
16 that's in the public interest, it's in the
17 public interest for the government to say,
18 okay, we'll give the property owners due
19 process and just compensation and so on and
20 let that huge natural resource be a public
21 resource rather than a private resource.
22 Because I think if you take the profit out
23 of some of these things, you don't have the
24 kind of greediness that comes with -- like

1 they did at Edison High School in Texas.
2 So my recommendation to these gentlemen to
3 take back to Peter Grannis is, make it
4 public, make it a public resource so that
5 the entire population, not just the oil
6 companies but the entire population can
7 benefit from cheap, natural gas. Just like
8 we have had in -- the State of New York
9 which produces energy in Messina, I think
10 they use waterfalls there and so on and so
11 forth. Why not make this huge, huge
12 natural resource in the ground a public
13 resource and with the kind of controls that
14 the public can require where there's not a
15 set of greed and profit. Thank you.

16 ALJ: Thank you very much. We have
17 two more speaker cards. The next speaker
18 would be Mark Lippolis.

19 SPEAKER: Yeah, my name is Mark
20 Lippolis and I also live in Windsor. And I
21 had the experience of being on the 30-inch
22 millennium pipeline that runs across our
23 property. And it was a good experience to
24 have this company come through. I kind of

1 compare it to, like, what the oil companies
2 will do. And first of all, I wasn't going
3 to get up here and speak, except the young
4 lady from the DOT sparked me to come up
5 here. I also worked for the DOT as a
6 bridge inspector. And so there's a couple
7 of things I'd like to touch bases on.

8 And one of them is, there's a lot of
9 good things that can come out of this, the
10 natural gas that's in the ground. But the
11 big thing we have to do is -- and I feel
12 for the Board that has to come up with all
13 the rules and regulations. These public
14 forums bring out a lot of good ideas, a lot
15 of negative ideas that can be all
16 incorporated into the final rules and
17 regulations. I must say that you got your
18 work cut out for you when you go and put
19 this all in writing. I wish you the best
20 of luck on it, you know, because there's a
21 lot riding on it, now and in the future and
22 generations to come and hopefully
23 everything will turn out for the better.

24 But one of the big things is, going

1 back to the DOT experience, is that you
2 have all these rules, regulations, plans
3 that need to be drawn up so you got
4 something to go by. And definitely you
5 need inspectors on each site location from
6 start to finish. I've been on many DOT
7 projects. When we first built I88, I was
8 out on that project. And if you do not
9 have inspectors out there on the projects,
10 it doesn't matter what contractor it is,
11 how good, how bad they are, they're going
12 to try and cut corners and make things
13 happen that you will not know about. And
14 the same thing will happen with the DEC.
15 If we do not have people on the job site
16 continuously, you know, hopefully we will
17 have inspectors on the job sites from start
18 to finish. How long these projects will be
19 out there, God only knows, I guess.

20 It's the same thing in bridge
21 inspections. With the Minneapolis bridge
22 collapse, you know, you had inspectors on
23 that job. The gusset plates on it were too
24 small apparently and they finally gave away

1 after only 50 years or so. They're going
2 to cut corners, especially in this day and
3 age with the way things are economically.
4 And we need the big boost with the natural
5 gas if possible. We need to come together,
6 mutual agreement on both sides. I myself
7 like to recycle and kind of like an
8 environmentalist myself. We live out in
9 the country, we used to live in the city.
10 I love the wildlife, the trees, the
11 recycling and everything else like that.
12 Although, I do not recycle as good as Chris
13 Burger does, but I'm not far behind it
14 because I love doing it. And that's -- we
15 have to come together on this. New York
16 State definitely needs the economic
17 resources from it. The country needs the
18 gas. We have to be, like many people
19 believe, oil independent, you know, for
20 future generations to come. It's just, it
21 could be a win-win situation and, you know,
22 like I said, I wasn't going to speak but,
23 you know, I was here the whole entire night
24 listening and there was a lot of good

1 ideas, a lot of negative ideas that were
2 brought to the board, that hopefully will
3 be incorporated into the rules and
4 regulations.

5 And above all, you know, we need to
6 have inspectors on these projects. It
7 would seem that the amount of money that
8 there is to be made out there, which there
9 would be no problem in having additional
10 people, you know, hired by the DEC or, you
11 know, God forbid, you know, the government
12 wants a cutback at all agencies. If he
13 cuts back with the DOT like he wants to, 15
14 percent, we can take those people and put
15 them over to DEC to do the inspections out
16 there. You know, I certainly could
17 probably handle that if we don't need
18 bridge inspectors anymore.

19 I think if we all work together on
20 this and not rush into it which is what the
21 governor is doing, you know, I think we're
22 taking a good approach on it not jumping
23 right into it. Hopefully by the midsummer
24 of '09 or the end of summer, you know, we

1 should have something together. We're all
2 heading in the right direction out there.
3 And God only knows, you know, the economic
4 times are bad and I think if we all work
5 together on it, we can, you know, work this
6 out.

7 Thank you very much. And it was
8 quite interesting tonight. And it's too
9 bad everybody didn't stick around, you
10 know, I guess all the most knowledgeable
11 people that want to be here are here, so
12 thanks for staying here to the end.

13 ALJ: Thank you. Barbara Abbot-King.
14 Again, this is the last card I have, so if
15 there's anyone else who hasn't been heard
16 from and wants to offer comments on the
17 Draft Scope, this is your chance.

18 SPEAKER: Thank you very much. I
19 have a couple points I'd like to make. One
20 is that last night through an e-mail
21 LISTSERV I received an e-mail that was very
22 interesting and I passed it on to a
23 geologist in the area who's actually
24 drilled wells, I'm in Southern Cayuga

1 County, and the gentleman had drilled about
2 25 wells back in 1985 overseen by the DEC.
3 The e-mail stated New York has a lot of
4 fault lines. And I'm just wondering,
5 listening to the lady from DOT about the
6 quality of concrete, whether it would stand
7 up against any kind of earth shifting. I
8 know in 2002, maybe it was 2001, we had an
9 earthquake and my plates rattled. I guess
10 the center of it was up north of us. So
11 I'm just wondering how these critical well
12 casings that separate the good water and
13 the bad water over a distance of several
14 thousand feet actually bear with an
15 earthquake.

16 Second point is that I'm from
17 Southern Cayuga County, that's about 65
18 miles north of here. The DEC for ten years
19 has overseen a number of dilated industry
20 and that is the large capot (phonetic)
21 industry. I'm a dairy farmer, I'm also a
22 crop farmer, I've been all my life for 40
23 years. I've never had my well polluted
24 except in 2002 when a large dairy farmer

1 spread liquid effluent over an uncased
2 wellhead that he had filled in with a
3 bulldozer that was not lined with concrete,
4 which is the proper way to fill a well
5 casing. I live due west from him, the same
6 aquifers was shared by my neighbor with the
7 same well aquifer. And I had never had
8 problems except when I turned on the
9 hydrant outside to water my livestock, my
10 cows and my horses, I had a stream of
11 manure with sediment. So I considered
12 calling DEC, which I did. I talked to
13 Angus Eaton he was the head of the AEM at
14 the time. This was in 2004. And I wrote
15 him a letter and I said, who owns the
16 manure that I just drew from my well. Who
17 owns -- is there a chain of custody so I
18 can reprimand or sue the person responsible
19 because it didn't come from my barnyard.
20 He said, no, I -- well, actually, he didn't
21 answer me. He didn't answer me for a year
22 and a half. This is the DEC, the head of
23 the AEM of the DEC. For a year and a half
24 I did not know the chain of custody of the

1 well, the pollution in my well or what it
2 was and I was forced to buy water from a,
3 fortunately I have a source of water
4 provided to me by the Village of Aurora, \$8
5 a thousand a gallon -- \$8 a thousand. So I
6 buy about two, \$300 a month of water.

7 So all I'm saying is this: The DEC
8 is overseeing an unregulated industry 65
9 miles north of here, it's called the large
10 dairy industry. We're being overrun.
11 They're also going to be -- and also have
12 these -- well, these dairy operators have
13 drilled wells -- excuse me. Have dug ponds
14 for their dairy. 15 million gallons of
15 effluent is also dumped into unlined,
16 unlined lagoons that are overseen by the
17 DEC.

18 So all I'm saying is that we have a
19 mess up in Southern Cayuga County created
20 by an unregulated industry that's overseen
21 by the DEC.

22 So I'm living it and I'm here to tell
23 you that there is a correlation between an
24 unregulated industry 65 miles north of here

1 and what you're about to see with another
2 unregulated industry, that being the oil
3 and gas. Thank you.

4 ALJ: I'm going to read through the
5 speaker cards for the people who weren't
6 present when I read their names earlier.
7 If they're here, just give a shout out and
8 let us know. Otherwise, we'll be closing
9 the record out. Wallace Crosby, Mark
10 Givens, Gary Hauptman, Rena Lobe, Eric
11 Lobe, Steven Hertz, Barbara Thomas, Glen
12 Stein, Charles Caskey, Joseph Hallick,
13 Madeline Cox, Wayne Lydecker, Karen
14 Glouber, Leigh Ann Avery. Apparently all
15 those people have left, I have no other
16 speaker cards, so we're about to close the
17 hearing out.

18 Before I do, on behalf of the
19 department I'd like to thank Broome County
20 College for making the facility available
21 to us here this evening. Our court
22 reporter for her services, it's been a long
23 night. I'd like to thank the people who
24 offered comments on the Draft Scope. These

1 comments will be considered carefully by
2 the DEC staff as it prepares the final
3 scope or outline for the supplemental
4 environmental Impact Statement.

5 If you know people who would like to
6 be heard on this subject but couldn't be
7 heard tonight, please let them know we're
8 taking written comments as well and they'll
9 be accepted through December 15th. There's
10 also two more meetings such as this that
11 will be held before the common period
12 closes, on December 2nd at SUNY Oneonta and
13 December 4th at Sullivan County Community
14 College.

15 As was indicated earlier, the DEC
16 expects to release its final scope early
17 2009 to be followed by a Draft Supplement
18 in spring 2009 and that a notice will be
19 published when the draft is ready for
20 review and comments.

21 Thank you all for your participation
22 tonight. We'll close the record out at
23 this time.

24

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24

C E R T I F I C A T I O N

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.

NANCY H. SWARTZ
HEARING REPORTER