

Attn: Bureau of Oil & Gas Regulation  
NYSDEC Division of Mineral Resources  
625 Broadway, 3<sup>rd</sup> Floor  
Albany, NY 12233-6500

Re: Comments on the 2011 rdSGEIS  
Comments on the Proposed HVHF Regulations  
Comments on the Proposed SPDES General Permit

To Whom It May Concern:

The Business Council of New York State, Inc. submits the following comments on the revised draft supplemental generic environmental impact statement (rdSGEIS) on the Oil, Gas and Solution Mining Regulatory Program's well permit-issuance for horizontal drilling and high-volume hydro-fracturing to develop the Marcellus shale and other low permeability gas reservoirs.

There are very few opportunities available to New York State with the same job-creating potential as exploring and developing shale gas. The safe and sustainable development of shale gas can help to transform the economy in New York's Southern Tier.

The effects of the recent global recession are still resonating in much of the state, and it would be unreasonable to disregard the substantial economic benefits that would come with utilizing this valuable natural resource. We need only to look south into Pennsylvania, where 48,000 private sector jobs in Marcellus Shale-related sectors were created in 2010, to see how development of this resource has positively affected their citizens and businesses.

If New York fails to allow the development of this resource, the state stands to lose over \$11 billion in economic output and thousands of private sector jobs between 2011 and 2020.<sup>1</sup> By conservative estimates, the development of the Marcellus has the potential to create 37,572 new jobs per year in New York,<sup>2</sup> jobs that may pay over \$79,184 annually — over double the average private sector wage upstate.

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<sup>1</sup> [Drilling for Jobs: What the Marcellus Shale could mean for New York](#) by The Public Policy Institute of New York State, Inc. p.3

<sup>2</sup> Drilling for Jobs p.3

New York has a protective, workable regulatory program in the development of New York's oil and natural gas supply for decades. There is no reason to believe that this will change in the future. Resourcefulness and hard work has sustained the New York natural gas industry for many decades. The industry's continued presence in New York State has provided landowners with royalties, and local governments with an expanded tax base and access to a locally generated resource. It is imperative that New York State's regulatory approach to shale gas drilling balance the Department's statutory goal "to enhance the health, safety and welfare of the people of the state and their overall *economic* and social well-being."

We believe that a finalized sGEIS can provide for the environmentally protective development of the Marcellus Shale in the Southern Tier. A finalized sGEIS can create economic opportunity in the region while ensuring a responsible approach to environment protection.

In July of this year the Public Policy Institute, Inc. (PPI), the research arm of The Business Council of New York State Inc. released the well-regarded *Drilling for Jobs: What the Marcellus Shale could mean for New York.*

The study finds that creating as few as 300 natural gas wells per year in the Marcellus Shale has the potential to generate more than 37,500 jobs annually in New York.<sup>3</sup> The report details the significant job-creating potential of the natural gas resource, comparing the private sector growth of select counties in the Southern Tier with a section of northern Pennsylvania.

In addition to investigating projected private sector employment in the Empire State, the report contrasts job growth data for five counties in New York (Allegany, Steuben, Chemung, Tioga and Broome) with a similar region in Pennsylvania (McKean, Potter, Susquehanna, Bradford and Tioga counties).

The Public Policy Institute found that the area of New York experienced job loss of 0.3 percent, while the counties just south of the state line saw private sector job growth of 4.7 percent. From 2009 to 2010, Oil and Gas Extraction and Support Activities for Mining, just two of the Marcellus-related industries, gained 4,355 jobs in Pennsylvania. In New York, these sectors combined saw only 42 new jobs.<sup>4</sup>

The report also explores the potential real property tax benefits of natural gas wells. PPI estimates that one Marcellus well in Owego, New York would generate \$190,300

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<sup>3</sup> Drilling for Jobs p.3

<sup>4</sup> Drilling for Jobs p. 12

in combined real property tax revenue for the county, town and school districts. Revenue such as this would offer a tremendous boost to local economies in the Southern Tier.<sup>5</sup>

At the Business Council, we are concerned that additional efforts to constrain the development of natural gas or the interjection of greater delays or uncertainty into the approval process could leave New Yorker's wonder what might have been.

Sincerely,

Darren Suarez  
Director of Government Affairs  
The Business Council of New York State, Inc.

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<sup>5</sup> Drilling for Jobs p. 12

## Clear Path to Progress

The Business Council's most significant concern with the SGEIS in its current form is that it would provide an unclear path through the regulatory process. Members of the regulated community continually request a transparent and predictable process. When making significant investments, all individuals seek opportunities to reduce exposure to uncertainty. Many of The Business Council's comments will focus specifically on the need to establish greater certainty. A continual refrain for our membership has been "provide a path or a standard and we will follow it." Certainty provides businesses an opportunity to review the value of an investment upfront and then weigh the benefits of investing.

The current proposals do not provide a clear table and flowchart of what is required in a permit application to drill a well. More importantly, there are both internal and external points of approval for specific reports, plans and requirements, without clear and overt coordination and oversight.

Specifically, there are no timeframes associated with approvals to be obtained from both inside and outside the DEC. Therefore, there is a great deal of regulatory uncertainty in the process. Companies that invest in New York need to know the ground rules and a predictable and timely process to make their investment decisions. The SGEIS is deficient in setting forth an application framework and relative timeframe for approval. Due to the breadth and scope of the review developed by the SGEIS, it would be difficult to provide narrow timeframes. However, the industry needs to be provided with some degree of certainty with the establishment of reasonable timeframes and a delineated regulatory process. The process established under the SGEIS should be clearly delineated as to avoid projects being subsumed by a morass of overlapping regulatory review or competing agencies or divisions inside agencies.

### **Timeframe**

A timeframe for the processing and review of a permit application following the completion of the SGEIS and associated regulatory processes should be clearly established. The revised dSGEIS and the proposed regulations contemplate review by multiple state agencies and divisions within DEC and, potentially, coordination with one or more federal interstate compact commissions, but there is no plan for how this will be accomplished in a timely manner. Compounding this problem is the fact that many of the reviews are contemplated as being sequential (e.g., the requirement to process the permit application for a minerals permit under Part 560 prior to seeking qualification for a stormwater general permit.)

One of the factors that made New York competitive in the past was the prompt turnaround for drilling permits in New York State. Prior to the implementation of the current regulatory proposals, it was typical to obtain a drilling permit in six weeks.

There is no assurance under the proposed regulatory structure that an operator will be able to get a permit in a timely manner. Moreover, in many cases it will take far longer given the requisite biological and other studies (e.g., aquifer testing) that are contemplated as a predicate to the permit application process.

#### *Uniform Procedures Act*

The New York Uniform Procedures Act (UPA)<sup>6</sup> establishes and governs review procedures for DEC regulatory permit programs and provides strict time periods for DEC action on applications for permits. The UPA does not currently apply to drilling permits because of the standardized and well-established history with these permits. New York State has approximately 13,000 wells and approximately 500 new wells are permitted each year. It is our observation that these wells have been permitted in a fair and environmentally-balanced manner in an appropriate timeframe.

There is little doubt that UPA has its critics from all sides, but UPA does have established timeframes. The timeframes contained in the UPA are often not met due to application completeness issues. Completeness of an application can be the result of the applicant or the regulatory body. The DEC should consider the establishment of similar timeframes with a method to address the completeness of an application. Applicants and the agency need hard and fast timeframes.

#### *Division of Minerals*

The Business Council strongly recommends that the central office Division of Mineral Resources be empowered to coordinate project review. The Division of Mineral Resources is ultimately at the heart of the review of the permit, and the SGEIS should ensure coordination with other divisions, agencies, and other regulatory bodies. Projects and investment can fail due to time delay when they are not provided a clear path forward.

The Business Council supports efforts to expand the staffing of the DEC to address HVHF permits and oversight. The Business Council strongly recommends that the additional staff that will be supported by industry fees should be directly involved in the oversight of natural gas drilling. The best way to ensure that industry fees are not misappropriated is through the concentration of those resources in one unit with specific expertise in all aspects of natural gas drilling. This will ensure proper

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<sup>6</sup> ECL § 70-0101

oversight of the industry, a timely response from the Department, and one office that is accountable. It is important that the public understand who is accountable. Defused oversight limits the public ability to determine what unit is not being responsive to the public's needs.

#### *LEAN review*

In January 2011, shortly after taking office as Governor, Andrew Cuomo signed Executive Order 4<sup>7</sup>, creating the Spending and Government Efficiency (SAGE) Commission. The purpose of SAGE is to modernize and rightsize government to make it more efficient, effective and accountable. Specifically, SAGE

is charged with redesigning the organizational structure of government by streamlining, consolidating or eliminating redundant and unnecessary agencies, authorities, commissions and other bodies that have overlapping missions; identifying operational improvements that increase cost effectiveness and improve service quality such as shared services, enhanced use of Information Technology and changes in service delivery mechanisms; creating meaningful metrics and targets to highlight inefficiencies; and identifying activities that are not central to the core mission of agencies, authorities or New York State government.<sup>8</sup>

The SAGE Commission has approved some recommendations that are very consistent with the utilizing of LEAN Management in government.

LEAN Management in Government has three major underpinnings:

1. The Goal – What are we in existence for? To deliver continuously improving value-added services (capacity, quality and speed of service) to customers (taxpayers) at lower costs.
2. Process Improvement – Everyone should have an understanding of LEAN thinking in order to be able to identify key processes, how they are performing and apply LEAN tools to make improvements in reducing costs/wastes and enhancing revenues.

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<sup>7</sup> <http://www.governor.ny.gov/executiveorder/4>

<sup>8</sup> Cuomo Executive Order 4

3. People are the Business – There needs to be a high respect for people. A constant search for how to improve things and reduce errors vs. who's responsible for the error.<sup>9</sup>

LEAN tools, in the hands of the state workforce, can cause great things to happen.

We should use this as an opportunity to showcase what the State of New York can do. The state should be fully committed to the appropriate, but timely, coordinated review of applications. Traditionally, LEAN tools are deployed after a program has been established, but there is no reason not to embrace LEAN upfront in the regulatory process. The goal of this program should be the review of the project by those that need to review it, not the review by all of those whom may be affected by it.

#### *Coordination with the Army Corp of Engineers*

The Business Council believes that when the SGEIS is amended to provide a clear path, that coordination of Army Corp (wetlands protection bureau) review should be included. Specifically, sections 8.1.3, and 8.1.2.2 need to be amended to include coordination with the Corp. The DEC and Corp have a long standing history of cooperation and coordination. Although the DEC and Corp have maintained different definitions of wetlands, when they are able to work together, the landowner and the environment are often provided with a more timely and better environmental outcome.

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<sup>9</sup> Quality and Productivity Improvement Center  
<http://www.leangovcenter.com/index.htm>

## Site Development

### Grasslands and Forest Protections

Section 1.7.13; 1.7.14; 3.2.3.10; 6.4; and 6.4.1 of the rdSGEIS provide for new restrictions on the development of private lands with tracts of grassland greater than 30 contiguous acres or forest greater than 150 contiguous acres. This appears to be an unprecedented permit precondition, and would encourage the development of unsustainable practices as a means to avoid these provisions.

The rdSGEIS is established to address specific issues of concern associated with the development of natural gas through the usage of HVHF. It is not, or should not be, developed to address land usage issues. The Business Council understands the value of preserving large assemblages of diverse habitat to provide the greatest opportunity to promote a healthy biota, but that should not come from the removal of multi-acres from future development. If the people of the state value the preservation of certain habitats, preservation should occur as the result of the purchasing of easements, or titles of property, from willing sellers using private or dedicated state resources. Landowners should not be deprived of their ability to utilize their property in this manner.

The Business Council is particularly concerned about the uncertainty that these new restrictions will interject into this process. The rdSGEIS does not contain a definition of contiguous grassland or forest. Additionally, the importance of a grassland or forested land as a habit can not be determined by acreage alone.

#### *Contiguous*

The rdSGEIS contains no definition of contiguous. For some, the definition of contiguous should be straightforward. If a grassland or forest is touching or connected throughout in an unbroken sequence it would appear contiguous, but it is not that simple. Is an area contiguous if it is transected by a road, interspersed with another habitat, or contains a historic utility right of way?

When reviewing wetlands, The Army Corp of Engineers uses the following definition for adjacent: "means bordering, contiguous, or neighboring. Wetlands separated from other waters of the United States by man-made dikes or barriers, natural river berms, beach dunes and the like are 'adjacent wetlands.'"<sup>10</sup>

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<sup>10</sup> 33 CFR 328.3(c)

The better defined a term like “contiguous” is, the better it will be for the regulated community and for public understanding. There has been a significant history of the determination of adjacent wetlands by the Army Corp allowing some degree of certainty. It is inevitable that some items will require on site determinations like “upland breaks,” but a fair degree of certainty and consistency has been provided through definitions. The Business Council would suggest the establishment of a clear and reasonable definition of contiguous.

### *Grasslands*

The Business Council is concerned that the restrictions contained on the development of wellheads in grasslands are too broad, without significant environmental justification, and do not provide certainty.

There is little doubt that grassland bird species are affected by a loss of habitat. The DEC and Audubon have been engaged in a number of efforts to protect grassland birds on private and public lands. These efforts are laudable, but they should occur as a result of voluntary participation by private land owners. Targeted programs based upon consent are likely to have the most beneficial effect on the preservation and restoration of critical areas of habitat for targeted grassland avian species.

A report in 2008 by the DEC determined that “Grassland birds have been declining faster than any other habitat-species suite in the northeastern United States. The primary cause of these declines is abandonment of agricultural lands, causing habitat loss due to reversion to later successional stages or due to sprawl development.”<sup>11</sup> Understandably, the report did not identify HVHF as a potential concern, but even at that time New York had 13,000 active wells. The number one concern was “abandonment of agricultural lands”.

The Business Council strongly believes that the development of natural gas is good for the agricultural industry. The New York and Pennsylvania Farm Bureau also agree that natural gas development can be beneficial to farmers. In Pennsylvania, natural gas drilling has provided farmers with needed capital to make improvements on farms, pay debt service and expand. It is likely that if farms are profitable, less agricultural land will be abandoned, and some may go back into agricultural production, providing greater habitat for grassland birds.

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<sup>11</sup> “A Plan for Conserving Grassland Birds in New York: Final Report to the New York State Department of Environmental”  
<http://ny.audubon.org/PDFs/ConservationPlan-GrasslandBirds-NY.pdf>

### *Definition*

Grasslands and forested lands should be defined. The rdSGEIS does not contain definitions of grasslands or forested lands. In the field, specific definitions can help operators determine the value of their investments and/or their ability to drill with a greater degree of certainty. The Department should provide greater certainty through the development of reasonable and workable definitions of grasslands and forested lands.

### *Perimeter/Area Ratio*

There is little doubt that not all grasslands or forested areas of the same acreage have the same habitat value. Using contiguous acreage to determine the value of habitat can result in a perversion of value. A better metric of contiguous acreage is the Perimeter/Area Ratio.

This ratio is calculated by comparing the perimeter, or edge, of a parcel to the area, or interior. Interior habitat is preferable for many grassland bird species as there are generally fewer disturbances, predators and social parasites, such as the brown-headed cowbird, which lays its eggs in the nests of other birds, in an interior location as opposed to on the edge of a parcel. Therefore, a low perimeter/area ratio has greater habitat value. This is another way of considering the shape of a grassland parcel. Thus, a perfectly square parcel is preferable to a long and thin rectangular one of the same area.

The same types of edge effects can greatly influence the ecology of a forested area. There is a significant amount of research that suggests that microclimate, vegetation, soil composition, and animal species found in that region are affected by the edge effects. However, often the exact impact that edge effects have on certain factors, such as temperature or predation, are unknown for different types of environments. It would be unfortunate to advance prohibitions that are not well designed or warranted because of a lack of data.

If the DEC maintains the current prohibitions on development in certain areas they should amend the current prohibitions based upon acreage to a more reasonable determination through the use of perimeter/area ratios and should be reflective of the ecological conditions in the area.

### *Singular Solution to Complex Issue*

The rdSGEIS proposes a broad solution to a complex problem that may result in unintended consequences. Landowner's interest ensuring that their land is good site for the development of a well head can circumvent the grassland and forest area prohibitions. There are numerous ways for current landowners without review by

the Department to alter the habitat on their private land. The Department ultimately should not use this regulatory process to curtail landowners behavior as a current landowner, at any time, could on their own clear the grassland or just allow it to become overgrown.

#### *Pre-disturbance Biological Studies*

The requirement that if an operator disturbs Forest or Grassland Focus Areas in a contiguous forest patch of 150 acres or more in size or a contiguous grassland patch of 30 acres or more in size should not submit the EAF or a well permit application prior to conducting a site specific ecological assessment in accordance with a detailed study plan that has been approved by the Department is onerous. Specifically the requirement that the study plan include pre-disturbance biological studies, including a minimum of one year of field surveys at the site to determine the current extent, if any, of use of the site by forest interior birds or grassland birds, is unwarranted. This provision will simply delay any project a minimum of a year and will provide data that ultimately will not significantly effect the development of a mitigation plan. A mitigation plan could be established through the use of GAAP analysis or some other study of the habitat, which would not require a year long in the field study.

#### *Invasive Species*

The provisions contained on invasive species are some of the most unwarranted. The current provisions interject a significant degree of uncertainty and strict liability. The provisions contained in sections 3.2.3.7 and 6.4.1.2 should be amended to provide operators with greater certainty.

As the provisions are currently drafted the potential for operators to be subject to retroactive liability and open end responsibility for the removal or eradication of invasive species is very real. These sections should require operators to adopt a series of best management practices to reduce the spread of invasive species through human transmission.

In many instances, invasive species present a significant threat to the state's rich biodiversity. Efforts should be made to curb the spread of invasive species. The state should continue to focus efforts on educating the public about the threat of invasive species; and individuals, industry, retailers, and governments should make reasonable and responsible efforts to curtail the spread of invasive species.

A significant amount of the transportation of invasive species is not associated with human traffic. It would be myopic to believe that invasive species transportation only occurs as a result of human activity. It is very clear at this moment that the

HVHF operators have not contributed to the transportation of invasive species; as it appears unjust to potentially require these operators to take actions to address invasive species beyond their control.

The baseline test appears to require the remediation of invasive species that were at the site prior to natural gas development. It is unclear when a project would deem complete under this proposal. As currently drafted, an operator could potentially be responsible for the removal of invasive species long after the drilling operation. These sections, however well intentioned, need to be amended to restrain the injection of additional uncertainty and potential liability in the New York HVHF drilling process.

### *Protected Species*

The rdSGEIS states that prospective project sites should be screened against the Department's Natural Heritage Database to determine if endangered or threatened species are known to occur within the vicinity.<sup>12</sup> The Department has determined that the method for reducing impacts to these species is to avoid siting projects in locations and habitats known to be utilized by endangered and threatened wildlife.

The rdSGEIS should include provisions that will allow for an online review of species of interests, protected species and species of concern. Currently the database is not very accessible.

The New York Natural Heritage Program (NYHP) surveys and monitors rare animals, rare plants, and significant ecological communities throughout the state. Animals include rare species of all vertebrate groups and selected rare species from the invertebrate groups of butterflies and moths, beetles, dragonflies and damselflies, mayflies, crayfish, land snails, and freshwater mussels. In addition, the program collects data on significant animal concentration areas, including bat hibernacula, anadromous fish, waterfowl, raptors, and nesting areas of terns, herons, and gulls. All rare flowering plants, ferns and fern allies are actively surveyed and monitored. Significant ecological communities surveyed include all rare ecological communities as well as the best examples of common communities

Access to this comprehensive database on the status and location of rare species and natural communities is limited. The information is used by public agencies, the environmental conservation community, developers, and others to aid in land-use decisions, but only upon a request. To request a review of a specific project sites, an applicant must write to NYHP, and include the following information:

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<sup>12</sup> rdSGEIS 7.4.3

- Why the information is needed (i.e., environmental assessment under SEQR, management plan)
- A brief description of the proposed project or activity (i.e., residential development, landfill siting)
- A brief description of the current land use at the project site
- Name of all counties and towns where the proposed project is located
- The photocopy of a map, preferably a 7½ minute U.S.G.S. topographical map, at a scale that includes identifiable geographic features
- Boundary of the proposed project clearly marked or highlighted on the map photocopy

Requests for data on specific project sites are processed in the order in which they are received and generally take 2-4 weeks but may be longer if there is a backlog.<sup>13</sup>

Access to this data will be critical to operators and landowners to determine the value of a given property, or the potential for the impacting a rare species.

The DEC should develop a means to provide the database online. The technology to provide this information in a manner that will increase the protections of rare species is readily available. Before another time constricting requirement is placed on operators, efforts should be made to allow more direct and timely access to the database.

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<sup>13</sup> <http://www.nynhp.org/>

## Prohibitions and Setbacks

The SGEIS contains a series of prohibitions and setbacks that will make it extremely difficult to lay out spacing units and locate well pads. In addition, smaller operators with limited lease holding will be disproportionately, significantly and adversely affected by these provisions. Industry evaluation of actual acreage controlled by several operators reveals that this will have the effect of reducing the available acreage by as much as 50 percent. Compounding this result is the fact that industry will in some cases be forced to use smaller units, which will increase surface disturbance by requiring a greater number of well pads.

The Department has demonstrated through a long history of implementation that the existing regulatory setbacks have worked well in practice. The Business Council strongly supports the inclusion of a provision establishing that setbacks and prohibitions should be subject to a variance process with the landowners consent. In addition, where good cause is shown as to why the setbacks and prohibitions could result in greater habitat disruptions, the operator should be authorized to be granted a variance. Lastly, any prohibitions and setbacks that are contemplated to be revisited in several years should expire automatically unless extended by formal order of the Commissioner.

Some of these prohibitions and setbacks preclude any development while others preclude the siting of well pads within prohibited areas. When these prohibitions and setbacks are mapped against leasehold interests, it often becomes impossible to lay out units or site well pads in a manner that makes development in New York State economically viable. As a consequence, operators will lose hundreds of millions of dollars already invested in minerals leases and related geological assessments, landowners will lose millions of dollars in royalties, significant tax revenue will be lost, and operators will be less willing to invest their drilling budgets in New York State. The result will be lost economic opportunity for New York totaling billions of dollars.

New York State's Environmental Conservation Law (ECL), as it pertains to oil and gas, has long been recognized as a "conservation statute." ECL § 23-0301 declares that it is in the public interest to "regulate the development, production and utilization of natural resources of oil and gas in this state in such a manner as will *prevent waste; to authorize and provide for the operation and development of oil and gas properties in such a manner that a greater ultimate recovery of oil and gas may be had, and*

*that the correlative rights of all owners and the rights of all persons including landowners and the general public may be fully protected [emphasis added].”*<sup>14</sup>

Likewise, subdivision 5 of §3-101 of the New York Energy Law declares that it is part of the energy policy of New York State “to foster, encourage and promote the prudent development and wise use of all indigenous state energy resources including, but not limited to on-shore oil and natural gas...[and] natural gas from Devonian shale formations...”<sup>15</sup> These guiding principles serve as the basis for the oil and gas regulatory framework in New York State.

In furtherance of these goals and objectives, New York State has created detailed statutory schemes for spacing and compulsory integration to promote the greater recovery of the resource and protect correlative rights. The spacing and permitting provisions are generally found in ECL Article 23, Title 5. In accordance with the fundamental policy, ECL § 23-0503(2) authorizes the issuance of permits to drill wells if a proposed spacing unit “conforms to statewide spacing and is of approximately uniform shape with other spacing units within the same field or pool, and abuts other spacing units in the same pool, unless sufficient distance remains between units for another unit be developed.”<sup>16</sup> For the unconventional, continuous plays like the Marcellus and the Utica, this is likely to require relatively uniform rectangular-shaped abutting units in order to avoid gaps in the development of the resource.

Also paramount in the well permitting process is the need to site a well pad in a location that minimizes environmental impacts to the maximum extent practicable. This is frequently accomplished by looking for locations that avoid stream crossings, wetlands, steep slopes, endangered species, and known areas of historic significance, and by taking into account other siting considerations consistent with BMPs. The existing regulations found in 6 NYCRR § 553.2 contain appropriate setbacks that have worked well for decades and have not led to any demonstrable problem with the 14,000 operating wells in New York State.

Against this backdrop, the DEC is proposing a series of additional setbacks and prohibitions. These include the following:

The prohibition of well pads in:

- primary aquifers and a surrounding 500 feet buffer; and

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<sup>14</sup> ECL § 23-0301

<sup>15</sup> New York Energy Law §3-101 (5)

<sup>16</sup> ECL § 23-0503(2)

- certain State lands (State Forests, State Parks, etc.).
- Setbacks:
  - 2,000 feet from a primary aquifer;
  - 2,000 feet from public water supply wells and reservoirs; and
  - 500 feet from private drinking water wells or domestic use springs, unless waived by the owner, and within 100-year floodplains.

The proposed rdSGEIS also declares that a supplemental environmental analysis (i.e., a site-specific Environmental Impact Statement [“EIS”]) will be required in certain instances. These instances cover three factors: location, drilling depth and type of water-related issues. The location carve-outs require a site-specific EIS:

- within a principal aquifer and surrounding 500 feet buffer (this would also require an individual SPDES stormwater permit;
- within 150 feet of a perennial or intermittent stream that is not a tributary to a public drinking water supply, storm drain, lake or pond; and
- within 500 feet of a tributary to a public drinking water supply.

Moreover, the setbacks proposed by the DEC are to the “edge of location” (i.e., the well pad), not to the well itself. Therefore, all estimates of acreage excluded from development must add an additional 200 feet from the restricted area/edge of surface disturbance to the centrally located well, which increases the setbacks significantly.

As an initial matter, the proposed prohibitions directly conflict with the policy objectives of the statutory scheme in that they fail to promote the recovery of the resource or protect the correlative rights of the landowners in the prohibition areas. For this reason alone, the prohibitions specified above should be eliminated. A clear example of this is the prohibition on drilling on state land even though New York State has a long track record of leasing state land for surface activities associated with natural gas drilling. Given the size of many of the state forest tracts, this will leave large undeveloped areas, which will hurt neighboring landowners in the municipalities in which the state land tracts are located from the loss of tax revenue.

Regarding the setbacks, although some reasonable setbacks are appropriate (e.g., the existing regulations), when multiple setbacks are established without the authority of the DEC to grant waivers for good cause, it becomes extremely difficult, if not impossible, for an operator to lay out units in an orderly fashion. Further complicating this issue is the trend in the industry to drill longer horizontal wells,

thereby reducing the number of well pads that are required. This trend further reduces the surface footprint of the industry and corresponding impacts to the environment. Because New York law limits the size of spacing units for shale wells up to 640 acres, it will be the practice of industry to layout back-to-back units with a common well pad for both units thereby draining areas up to 1,280 acres (two square miles). As such, the location of the well pad becomes a critical factor in laying out spacing units based upon mineral lease rights and other environmental considerations.<sup>17</sup>

One operator has laid out spacing units based upon back-to-back 640 acre unit spacing, its mineral leases and traditional factors to avoid sensitive environmental areas. In the Owego area of Tioga County, this operator has sufficient mineral rights to develop twelve 640 acre spacing units with back-to-back spacing units and common well pads. Unfortunately, when land constraints are overlaid with the regulatory setbacks being proposed by the DEC, only two of the units are feasible. Because the spacing law allows spacing “up to” 640 acres, this operator may be able to develop other smaller units, but taking such an approach will increase the number of well pads significantly, thus increasing the cost to the operator (including, but not limited to, the significant cost to prepare a greater number of permit applications and the regulatory fees associated with those applications) and increasing both the surface impacts and truck traffic. Even then, certain areas will be inaccessible, with the consequence that millions of dollars already invested in leases will not be practical to develop. Of equal importance is the fact that landowners and municipalities will lose the revenues associated with the development of this acreage.

Another operator has gone through a similar exercise in Chemung County, New York. The primary aquifer provision will eliminate significant developable acreage. This operator estimates that 50 percent to 60 percent of their current leasehold in Chemung County is located in primary aquifer areas. And, this prohibition is being proposed even though the same operator has developed four Trenton Black River wells through the very same primary aquifer without any environmental contamination. It is difficult to understand the rationale behind the prohibition for Marcellus-type wells while Trenton Black River wells are allowed to proceed. The primary aquifer prohibition and the many other setbacks proposed will require abandonment of attractive and logical drill sites and cause losses to the operator, mineral owners and municipalities amounting to hundreds of millions of dollars. This

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<sup>17</sup> The Business Council supports amending the current law to allow for 1,280 acres spacing units. When the law was adopted 640 acres was the industry standard, but it is no longer. 1,280 spacing units would meet many of the rSGEIS goals.

will also drive locations out of valleys and onto the more visible, timbered slopes, which is illogical from a resource protection standpoint.

Given the foregoing, industry predicts that the acreage available to develop the shale resources in New York is far less than the 80 percent being predicted by the DEC and may approach numbers as low as 40 to 50 percent, if not lower. This situation will:

1. leave large tracts without development of the resource in direct contrast to the ECL's statutory directives;
2. subject operators to lost investments in many leases;
3. preclude landowners from reaping economic benefits from the development of shale resources in New York State;
4. disproportionately effect smaller operators, as it may make their lease holding uneconomical;
5. deny significant tax revenue to local municipalities as well as the state; and
6. deter most, if not all, operators from giving any serious consideration to developing any unconventional plays in New York State (i.e., the Utica as well as the Marcellus).

The overall result will be a large amount of stranded acreage that will not be drilled, leaving natural gas in the ground along with landowners who will be economically impacted and who will not understand why their land will not be drilled when neighboring properties have reaped the benefits.

As an alternative, the Business Council recommends that many of the setbacks be eliminated or reduced to the existing setbacks, or setbacks be adopted that are consistent with those in place in other neighboring states. The Business Council also strongly supports the inclusion of a provision establishing that setbacks and prohibitions should be subject to a variance process with the landowners consent.

Further, we recommend that broad waiver provisions be included in the regulations to allow setbacks to be waived by the DEC for good cause shown. Finally, for the prohibitions or setbacks that the Department has indicated in supporting material that the Department is proposing to revisit. The Business Council recommends the inclusion of an automatic sunset in the final SGEIS. By including an automatic sunset provision, the Department would still be able to extend those provisions by emergency rulemaking, if warranted, but would be in a far better position to open up more areas of the state for natural gas production.

## Air Emissions

Based upon cumulative series of worst-case scenarios, the rdSGEIS proposes unrealistic air mitigation measures, many of which are unavailable or impracticable. In addition, the proposals fails to take into account the significant changes that are being proposed by the United States Environmental Protection Agency (“EPA”) to regulate air emissions from drilling and stimulation activities. Furthermore, many of the proposed mitigation measures in the rdSGEIS for nonroad drilling and completion engines are expressly preempted by Section 209(e) of the Clean Air Act. Most significantly the mitigation requirements are predicated on the possible not the practical, with no recognition that such requirements will have other environmental effects, or are unattainable.

### *EPA Standards for Oil and Gas Sector*

As recently as Aug. 23, 2011, the EPA proposed new standards specific to the oil and gas sectors.<sup>18</sup> The rule proposes regulations based upon proven technologies that would reduce air pollution from the sector while enabling responsible growth in U.S. oil and natural gas production. EPA’s proposed rule includes wells that are hydraulically fractured (both new wells and workover operations), emissions from storage tanks, pneumatic device fugitive emissions, and some glycol dehydrators.<sup>19</sup>

### *Section 209(e) of the Clean Air Act*

Section 209(e) of the CAA, expressly preempts any state from adopting or attempting to enforce “any standard or other requirement relating to the control of emissions” from nonroad engines.<sup>20</sup> *Engine Manufactures Association (EMA) v. EPA*, established that this preemption applies both to **new and to existing nonroad engines.**<sup>21</sup> Specifically, *EMA v. EPA*, establishes a clear federal preemption of any includes requirement that an engine “emit [no] more than a certain amount of a

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<sup>18</sup> EPA, 40 CFR Parts 60 and 63, EPA-HQ-OAR-2010-0505, Oil and Natural Gas Sector: New Source Performance Standards and National Emission Standards for Hazardous Air Pollutants Reviews, <http://www.epa.gov/ttn/atw/oilgas/fr23au11.pdf>

<sup>19</sup> EPA, 40 CFR Parts 60 and 63, EPA-HQ-OAR-2010-0505, Oil and Natural Gas Sector: New Source Performance Standards and National Emission Standards for Hazardous Air Pollutants Reviews, <http://www.epa.gov/ttn/atw/oilgas/fr23au11.pdf>.

<sup>20</sup> 42 U.S.C. §7543(e)

<sup>21</sup> *Engine Manufactures Association v. EPA*, 88 F.3d 1075 (D.C. Cir. 1996)

given pollutant, be equipped with a certain type of pollution control device, or have some other design feature related to the control of emissions.”<sup>22</sup>

#### *Proposed Aftertreatment Are Technically Flawed*

The rdSCEIS practically requires the use of Diesel Particulate Filters (DPF) and Supplemental Catalytic Reduction (SCR) to nonroad drilling and completion engines.<sup>23</sup> The engine manufacturers state that DPFs and SCRs are not proven aftertreatment technologies to control PM and NOx from drilling and completion engines. Their assertions are supported by findings from US EPA (EPA) and California Air Resources Board (CARB). Both agencies have tested and verify the applicability and effectiveness of aftertreatment systems through a comprehensive verification program. Neither EPA or CARB have verified a retrofit systems to reduce NOx emissions for nonroad engines or equipment greater than 500 hp. EPA lists no verified aftertreatment systems to reduce PM from nonroad engines or equipment greater than 500 hp. CARB lists only two vendors with CRDPF systems to reduce PM from nonroad engines and equipment between 600 and 1000 hp, and no CRDPFs for nonroad engines greater than 1000 hp.

The reason that EPA and CARB have verified few retrofit systems for nonroad engines greater than 500 hp is the large size, performance requirements, and duty-cycle of these engines create technical barriers to the use of emissions reduction aftertreatment technologies. Drilling and completion engines are generally greater than 750 hp and have very unique duty cycles. Those engines often operate at low load or may idle for a considerable length of time between periods of extremely heavy loads. Because of the amount of time that the engine operates at low loads, the engine exhaust may not reach the temperature needed for the catalyzed PM or SCR aftertreatment systems to operate properly. In the case of CRDPFs, the low operating temperatures will cause PM to build up in the filter thereby increasing back pressure and potential engine failure. If an SCR system is added, the SCR system may not work when actual exhaust temperatures are insufficient to reduce NOx emissions, and so will be ineffective. In addition, drilling and completion equipment designs are extremely complex, and adapting the equipment for either CRDPFs or SCR systems may be impractical and expensive due to weight limits, space constraints, and reliability concerns.

#### *Worst Case Scenario*

The proposed air emissions controls are based upon a worst-case dispersion modeling scenario. While this may provide assurance that the air emissions are

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<sup>22</sup> EMA v. SCAQMD, 541 U.S. 246, 253 (2004).

<sup>23</sup> rdSCEIS 1.7.11 and 7.5.1

controlled in a worst-case scenario, those prescriptive controls should not be required at every location in the state, at every time of day or year, nor at every tank battery regardless of production. To do so would be unnecessary and would greatly over-control most sources.

For example, in its modeling DEC chose to:

1. Use the worst-case hourly emission factor for hydraulic fracturing engines for the entire 24-hour averaging period. This is unreasonable and ignores data provided by IOGA NY demonstrating that during a typical fracturing job the pump engines will only operate about 10 out of every 24 hours (e.g., 5 stages of 2 hours each). The importance of this assumption is that the fracturing pump engine emissions emit the most particulates of any equipment in the drilling and completion process and particulates were the pollutant of greatest concern in the DEC modeling results.
2. Include simultaneous emissions from drilling and fracturing operations when evaluating short-term impacts. This was done despite the fact that (1) industry has indicated that it will not/cannot simultaneously drill and fracture on the same well pad, and (2) the rdSGEIS indicates such co-occurrence is not allowed (see 7.5.3.1 Well Pad Activity Mitigation Measures, p. 7-108).
3. Locate each of the largest emissions sources at the edge of the well pad and on its downwind side; which greatly maximizes off-pad impacts. Industry provided examples of well pad layouts and even provided DEC with field trips to visit operational well pads; none of which had such a layout. Because of the need to stage drilling and fracturing equipment surrounding the well(s) it is highly impractical to locate all large diesel equipment on the edge of a pad. For practical reasons, it simply does not happen. If DEC wishes to make this an operational requirement, that is an option, but it is entirely unrepresentative to model emissions impacts based on such a scenario.
4. Although the agency intends to require the use of ultra-low sulfur fuel (ULSF), it disallowed any emissions credit from its use in their modeling analysis, even though this is the only diesel fuel locally available.

The new federal engine rules, as well as EPA's proposed rules for oil and natural gas production activities, were or are being developed with extensive input from all affected sectors and are designed to protect the public's health and welfare while

allowing reasonable energy development. The DEC has chosen to mandate separate and unique controls, some of which are technically infeasible, not cost-effective, and/or potentially unsafe for certain sources. EPA's rules have provided the state with all the air emission control options necessary to regulate the development of shale gas. The DEC should remove the prescriptive source-specific emissions controls specified in the proposed rdSGEIS and instead rely on the EPA's air emissions control requirements for those same sources both in the current version of the proposed rdSGEIS and when conducting their air emissions permit application reviews.

As alternative to requiring DPFs and SCRs, the Department should determine with the industry if there are specific permit conditions such as operating hours, number of engines or other actions that will reduce the possibility of the realization of the worst case scenarios.

## Transportation Mitigation Measures

The rdSGEIS proposes that all operators submit a road transportation plan, which must be reviewed by the New York State Department of Transportation (NYSDOT). This will cause unnecessary delay and lead to additional staffing needs that are unnecessary. Most importantly this provision includes an other opportunity for significant uncertainty to enter into the process.

The rdSGEIS's proposed mitigation measures for road impacts raise significant concerns. ECL 23-0303(2) gives primary jurisdiction over roads to local municipalities and, as such, the rdSGEIS states that the DEC will include as a supplemental permit condition stating that the issuance of a well permit does not relieve an operator from compliance with local regulation<sup>24</sup>. The rdSGEIS strongly encourages operators to enter into road use agreements with impacted local municipalities and requires operators to file copies of their road use agreements with the DEC<sup>25</sup>. Such a road use agreement should comprise all of the required mitigation.

Unfortunately, the rdSGEIS goes on to require submission of a transportation plan, which will be incorporated by reference into the drilling permit.<sup>26</sup> The required transportation plan must be prepared by a NYS-licensed professional engineer in consultation with the DEC.<sup>27</sup> It must include, among other things, the number of anticipated truck trips, times of day when trucks will be operating, proposed haul routes, the locations of, and access to and from, parking/staging areas and the ability of the roads proposed in the haul route to accommodate the anticipated traffic.<sup>28</sup> All of this is duplicative and unnecessary where an operator has entered into a road use agreement. The submission of a road use agreement, therefore, should obviate any requirement for a transportation plan.

The transportation plan also must include a baseline survey of all roads, bridges and culverts according to the NYSDOT 2010 Network Level Pavement Condition Assessment Manual.<sup>29</sup> Given the desire that the SGEIS will have a lengthy useful lifespan, it is inappropriate to articulate the manner in which an operator shall assess baseline road conditions which will change over time and vary in different

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<sup>24</sup> rdSGEIS, § 7.11.3

<sup>25</sup> rdSGEIS, §§ 7.11.3, 8.1.1.4

<sup>26</sup> rdSGEIS, §§ 7.11.1.1; 7.11.1.3

<sup>27</sup> rdSGEIS, § 7.11.1.3.

<sup>28</sup> rdSGEIS, §§ 7.11.1.1; 7.11.1.3.

<sup>29</sup> rdSGEIS, § 7.11.1

road use agreements. It detracts from local jurisdiction over roads by taking away the right of operators and local municipalities to determine the appropriate manner in which to document baseline conditions.

Also problematic is the requirement that an operator submit a copy of its road use agreement and transportation plan to the NYSDOT and the expectation that the NYSDOT will have an advisory role with respect to both.<sup>30</sup> First, there is no need for the NYSDOT to review and comment on an operator's road use agreement with a municipality. That is an issue appropriately left to the signatories of the agreement. Second, the rdSGEIS is silent as to the scope and extent of the NYSDOT's role and the timing associated with its review. This creates permitting uncertainty for operators and, more than likely, unnecessary delay in permitting. It also creates unnecessary regulatory cost in a time when New York State needs to streamline government, not expand it.

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<sup>30</sup> rdSGEIS, § 7.11.1.3; 8.1.2.2.

## Local Response

An area of significant uncertainty is created in the rdSGEIS concerning the role of local governments in the permitting process. Notwithstanding a 30 year history of interpreting subdivision (2) of ECL § 23-0301 as preempting all efforts by municipalities to regulate or zone natural gas drilling and stimulation activities, the rdSGEIS seemingly reverses this history and contemplates a role for municipalities in the siting and permitting process. The rdSGEIS also proposes as a catch-all mitigation measure that the DEC will consult with local municipalities regarding the timing of development and will limit drilling permits to avoid potential impacts on community character, tourism and other socioeconomic impacts (e.g., visual, noise and road impacts) associated with concentrated development. rdSGEIS, § 7.11.3.

It is unclear how the DEC will limit permits and how this will impact pending applications by various operators, including operators facing lease expirations. There also are no standards articulated for when limits should be imposed, how limits would be imposed or the length of time for any limits. This creates significant uncertainty for industry, jeopardizes lease holdings and makes New York anti-competitive. It also runs counter to the statutory mandates for shale wells to drill “all horizontal infill wells in the unit to be drilled from a common well pad within three years of the date the first well in the unit commences drilling” ECL § 23-0501(1)(b)(1)(vi). Further, involving local municipalities in the calculus, some of which may or may not favor drilling, flies in the face of the ECL’s express preemption over local regulation of the industry.

## Uncertain Process Regarding Fracturing Fluids

Section 8.2.1.1 of the rdSGEIS would require each operator to evaluate the available alternatives for the proposed additive products that are efficacious but which exhibit reduced aquatic toxicity and pose less risk to water resources and the environment. The rdSGEIS outlines the following specific evaluation criteria: (1) impact to the environment caused by the additive product if it remains in the environment, (2) the toxicity and mobility of the available alternatives, (3) persistence in the environment, (4) effectiveness of the available alternative to achieve desired results in the engineered fluid system, and (5) feasibility of implementing the alternative.

This proposal adds an element of significant uncertainty in the permitting process. This requirement appears to be in complete contrast to the standard practices of the Department and inconsistent with a base understanding of the study of toxicity. Since the operator and the service company are responsible for determining efficacy to maximize the recovery of the natural resource, the agency should abandon this requirement.

During the time that the DEC has been evaluating environmental impacts associated with HVHF, considerable progress has been made with the industry “greening” the hydraulic fracturing process. Several years ago, it was not uncommon to see as many as 20 chemical additives being used in an effort to improve the efficacy of the stimulation technique. Today, many operators are using as few as six chemical additives and have reduced the volumes of additives without compromising efficacy.

Notwithstanding the significant process, the rdSGEIS and the regulations require as part of *each* permit application a review and certification by the operator that the operator is using hydraulic fracturing additives that are the least toxic alternatives available. Although this requirement attempts to qualify the analysis requiring efficacy, the language is confusing and is not always consistent among the rdSGEIS and the various places where this requirement appears in the draft regulations.

Initially, it is important to stress that all decisions concerning the makeup of hydraulic fracturing fluid are based upon an engineering evaluation that alters the additive mix to maximize the efficacy of the hydraulic fracturing process within the target formation. Very often, adjustments are made in the field based upon data obtained during the hydraulic fracturing process. Given the great progress that has been made by the industry without compromising efficacy, there is no need to mandate this type of analysis.

## **STORMWATER GENERAL PERMIT FOR HIGH-VOLUME HYDRAULIC FRACTURING**

The Independent Oil and Gas Association has submitted comments supporting the assertion that uncontaminated stormwater discharges associated with oil and gas extraction activities are exempt from the federal National Pollutant Discharge Elimination System (NPDES) program and therefore from the NYSNPDES program, as well as under § 402(I)(2) of the Clean Water Act as clarified in §323 of the Energy Policy Act of 2005. The Business Council supports IOGA-NY's assertions.

Additionally, the Business Council has the following technical concerns associated with the HVHF GP.

The Business Council is concerned that the regulation is not representative of what occurs in the field with the transition between construction and HVHF operations. The DEC should modify the final stabilization requirements to remove the requirement that all construction activities must be completed before drilling can begin to allow for the drilling of multiple wells on a single pad.

The general permit requires that the well pad and access road and their associated stormwater management systems be completed and fully stabilized during the construction phase prior to commencing the HVHF phase. It makes sense that the access road and associated stormwater management system be fully stabilized prior to commencing the HVHF phase. However, the area disturbed during construction of the well pad and associated stormwater management system will be completely encompassed by the area disturbed during the HVHF phase. If there would be a significant delay between the completion of the construction phase and the beginning of the HVHF phase, this would be acceptable, but it is not the norm. Instead, NYSDEC should define the maximum allowable period between the two phases for which fully stabilizing the well pad is not required.

The HVHF GP should incorporate the flexible site mapping requirements in the Multi-Sector GP at Part III.C.2. together with the provisions in Sector I for Oil and Gas Extraction and Refining.

The proposed HVHF GP should mirror the flexibility in structural and non-structural BMP selection available in the Multi-Sector GP Part IX.B.

The BMP provisions in Part X are far too numerous and unnecessarily prescriptive. They should all be replaced with flexible narrative standards for BMP.

The benchmarking requirements in Part X are excessive, given the purpose of stormwater outfall monitoring as described in Section 3.e. The DEC should replace all of the proposed benchmark monitoring requirements with the current total suspended solids (“TSS”), chlorides and pH requirements in the Multi-Sector GP coupled with targeted supplemental sampling and analysis, if needed. The proposed testing requirements go well beyond what is required of any other industry in New York State, are very expensive and will send a signal to the oil and gas industry that New York State is not open for business.

The department should adopt annual Inspections in lieu of Benchmark Monitoring. Pennsylvania’s PAG-03 allows the oil and gas extraction industry to conduct an Annual Inspection in lieu of benchmark monitoring. The facilities are required to inspect annually due to the medium risk associated with stormwater discharges that they pose. The DEC should incorporate a similar annual inspection option into the HVHF GP in addition to the streamlined benchmark monitoring recommended here.

Specific monitoring requirements with extensive effluent limit guidelines are presented in the draft permit for the HVHF and Production phases. The GP calls for stormwater sampling to be performed during every qualifying storm event during the HVHF phase and quarterly during the Production Phase. The GP defines a qualifying event as one which has at least 0.1 inches of rainfall. Stormwater sampling is extremely difficult to execute on unmanned sites such as those involved with gas production. This monitoring requirement will be even more difficult to meet, since there is likely to be little or no runoff during a storm event with such a small rainfall on sites with gravel surfaces. The department should instead identify a larger rainfall event that will actually result in discharges from the site, as qualifying events.

During the production phase, it will be impossible to visually classify discharges on a quarterly basis within 60 minutes of a qualifying storm event. Well sites are unmanned, remote, and rainfall is unpredictable. These factors will not allow inspectors to reach each site within the allotted time frame during a qualifying event. The Department is developing a regulatory standard that will be impossible to meet. Quarterly visual classification of discharges should not be required during the Production phase.

Instead, it would be more appropriate to require quarterly inspections of the equipment, above ground piping, storage tanks and surrounding soil for visual

evidence of leaks or contamination. This would provide a regulatory standard that could be met, and allow for a predictable work load, and predictable costs by the industry.

The Notice of Termination should be submitted following full restoration and stabilization of the site when the well is ready for production, not following plugging and abandonment of the gas well. The plugging and abandonment of the gas well, which may occur 10 to 20 years into the life of the well, should be a separate action under the GP program.

In addition, the regulations contain many definitions and requirements that duplicate the definitions and requirements contained in the proposed, as well as existing, comprehensive minerals regulations. Often, there are subtle differences between the regulatory definitions, which will lead to significant confusion. Compounding these problems is the fact that the water quality regulations contemplate sequential review of water quality issues after a drilling permit has been issued. This will lead to duplicate review of many issues, which is the hallmark of regulatory inefficiency.

## **BONDING FOR ALL WELLS**

The DEC has proposed to amend § 551.7 of the existing regulations to eliminate the maximum bond required for plugging and abandonment of an individual well and a \$2 million cap on bonding for operators that operate multiple wells (i.e., blanket bonding). Although industry supports reasonable bonding requirements, it is unreasonable to eliminate bonding limits and not encourage blanket bonds or other funding mechanisms that will be more cost effective to industry. The DEC needs to keep in mind that shale gas wells are expected to be productive for decades. As such, requiring individual bonding for each well will tie up capital unnecessarily. Bonding is only necessary where an operator defaults on its plugging and abandonment obligations. In recent times, there have been no such defaults. Accordingly, the proposed amendment of §551.7 goes too far.

### **Water Withdrawals and Natural Flow Regime Considerations**

The proposed regulations seek to implement the Natural Flow Regime as a minimum flow requirement on all water withdrawals exclusively for the natural gas industry, including water withdrawals subject to federal interstate compact commission approval by the Susquehanna River Basin Commission (“SRBC”) or the Delaware River Basin Commission (“DRBC”).

The Natural Flow Regime does not balance competing interests and is unnecessarily conservative in its approach. In addition, the use of the Natural Flow Regime (“NFR”) method, specifically in the Susquehanna River Basin, often results in a more stringent flow requirement than would be required utilizing the methodologies practiced by the SRBC.

The proposed rdSGEIS states that a primary emphasis of the DEC is protection of water resources and that water withdrawals affecting surface or groundwater have been identified as a potential impact resulting from use by the natural gas industry for HVHF. The utilization of the NFR method to calculate passby flows, as proposed by DEC, is unduly stringent, and contradicts the passby methods employed by the SRBC and DRBC, both of which have regulatory authorities for water withdrawals in their specific jurisdictions. The SRBC and DRBC have been effectively regulating water withdrawals for decades in New York State and the DEC acts as the New York State representative on these commissions. The SRBC has the most experience with the natural gas industry and their methods have been demonstrated to be

protective of existing aquatic communities, are designed to be conservative, and incorporate data collected specific to the location of the proposed withdrawal.

Chapter 401 of the Laws of 2011 established that the DEC would have primacy regarding water withdrawals greater than 100,000 gallons per day outside of the Susquehanna and Delaware basins. However, that legislation specifically exempts from the permitting requirements withdrawals that are permitted by the DRBC or the SRBC. This is current legislative and gubernatorial recognition of the need for the DEC to defer to the Federal Interstate Compact Commissions regarding water withdrawals subject to their jurisdiction. The DEC, therefore, should defer to the SRBC passby flow guidance (e.g., SRBC Policy 2003-01), which is environmentally protective and applied uniformly amongst all water users. The DEC, with their leadership position within the SRBC and the DRBC, should strive for uniform review standards between itself and the river basin commissions.

Under the NFR methodology, all withdrawals, including those on large river systems, regardless of withdrawal quantity and rate, would require a passby. While many operators have developed storage capacity and all are utilizing recycled waters, uninterrupted withdrawals with predictable availability are important for year-round operations by the industry. Using the NFR methodology would greatly increase the number of days per year that a water source would be unavailable, when compared with the SRBC passby guidance. Since water withdrawal points would be unusable during much of the year under the NFR methodology, industry will be forced to construct a greater number of water withdrawal locations potentially increasing the overall habitat impact, and likely reducing the opportunities to share sources among operators.

All of the concerns expressed by DEC in the proposed rdSGEIS regarding potential water withdrawal impacts, including reduced stream flow, impacts to aquatic habitats and ecosystems, impacts to wetlands, and aquifer depletion, are addressed by the river basin commissions through their extensive water withdrawal regulatory programs. In the proposed rdSGEIS, the DEC itself recognizes that the amount of water withdrawn specifically for HVHF is projected to be low compared to overall water use in New York State, increasing fresh water demand by only 0.24 percent. In light of this small increase in projected water use and the existing authorities operating in New York State, this proposed duplicative effort is unwarranted. The programs implemented by SRBC and DRBC are environmentally protective, robust, and should be utilized by DEC for regulating withdrawals by the natural gas industry. Outside of the jurisdictional areas of the SRBC and the DRBC, reasonable standards

should be employed in accordance with the balancing requirements of the ECL that promote the development of the resource and protect the environment.

### **Alternative**

Many of the proposals outlined will create regulatory uncertainty, are unattainable, or will provide negligible environmental benefit at a significant cost. The DEC should consider the use of environmental mitigation, compensatory mitigation, or mitigation banking. The failure of the mitigation projects has been well documented, but the failure stems from a lack of oversight, and difficulty to determine just compensation, but the possibility of great mitigation projects makes the endeavor worth the effort.<sup>31</sup>

Last year the White House Council on Environmental Quality (CEQ) finalized new guidance on the use, documentation and enforcement of mitigation measures under the National Environmental Policy Act (NEPA).<sup>32</sup> While the guidance contained many provisions it clearly established CEQ's support of mitigation projects.

The new Guidance endorses the use of this mitigated Finding of No Significant Impact (FONSI) when accompanied by "enforceable mitigation measures."<sup>33</sup>

CEQ recommends a series of steps to ensure that mitigation commitments are expressly stated and adhered to, and calls upon individual agencies to supplement its Guidance with their own procedures that make "relevant funding, permitting, or other agency approvals ... conditional on performance of mitigation commitments."

### **Conclusion**

Much of the rdSGEIS and the regulatory proposals that are based upon the rdSGEIS rely too heavily on worst-case scenarios as purported justification. This is improper in the context of the SGEIS process and has led to a number of regulatory proposals that are unnecessarily conservative, all of which has the impact of driving up the cost of compliance without any corresponding benefit to the environment or public safety. This has the impact of making New York non-competitive with other neighboring states, which drives out the few remaining players and stifles the return of industry to New York State.

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<sup>31</sup> <http://www.epa.gov/owow/wetlands/pdf/GAO05898.pdf>

<sup>32</sup> [http://ceq.hss.doe.gov/current\\_developments/docs/Mitigation\\_and\\_Monitoring\\_Guidance\\_14Jan2011.pdf](http://ceq.hss.doe.gov/current_developments/docs/Mitigation_and_Monitoring_Guidance_14Jan2011.pdf)

<sup>33</sup> Ibid.

Again, such an approach is outside the definition of “reasonably foreseeable.” As a result of these and other ultra-conservative assumptions, the industry is now confronted with required mitigation strategies based on unrealistic, worst-case assumptions. These are but a few examples of an over-arching, worst-case approach that DEC has employed throughout the rdSGEIS.

The most significant concern of The Business Council is that the SGEIS in its current form does not provide a clear path through the regulatory process. Many of The Business Council’s comments have focused specifically on the need to establish greater certainty. Certainty provides businesses and the people of the State of New York with an opportunity to review the value of an investment upfront and then weigh the benefits of investment.