Otsego 2000

The Department of Environmental Conservation's Draft Regulations Pertaining to Well Permit Issuance for Horizontal Drilling and High-Volume Hydraulic Fracturing, Including the Revised Proposed Expressed Terms of 6 N.Y.C.R.R. Parts 52, 190, 550-556, 560, 750.1 and 750.3, the Revised Regulatory Flexibility Analysis for Small Businesses and Local Governments, the Revised Job Impact Statement, the Revised Rural Area Flexibility Analysis, and the Revised Regulatory Impact Statement

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INTRODUCTION

On behalf of Otsego 2000 and the signatories listed on the annexed addendum, Zarin & Steinmetz respectfully submits the following comments on the Department of Environmental Conservation's (the "Department") draft regulations pertaining to Well Permit Issuance for Horizontal Drilling and High-Volume Hydraulic Fracturing, including the revised Proposed Expressed Terms of 6 N.Y.C.R.R. Parts 52, 190, 550-556, 560, 750.1 and 750.3, the Revised Regulatory Flexibility Analysis for Small Businesses and Local Governments, the Revised Job Impact Statement, the Revised Rural Area Flexibility Analysis, and the Revised Regulatory Impact Statement (collectively the "Proposed Regulations").

These comments supplement, and are in addition to, Otsego 2000's previous comments, dated December 30, 2009 ("2009 Comments") and January 10, 2012 ("2012 Comments"), which are incorporated by reference herein and reiterated in their entirety. (Copies of Otsego 2000's 2009 Comments and 2012 Comments, without exhibits, are annexed hereto for the Department's convenience.)

Otsego 2000 is a registered non-profit entity, duly organized and operating under Section 501(c)(3) of the Internal Revenue Code. Otsego 2000 is devoted to intelligent planning for the environment in Otsego County and neighboring regions, and to preventing irreversible change and damage to the unique, historic resources, and environment of the area. While Otsego 2000 recognizes that the Department has responded to various comments made on the original DSGEIS, the rDSGEIS, and the previously Proposed Regulations, the current Proposed Regulations are still legally defective and lack a rational basis in many critical respects.

Many of the flaws in the Proposed Regulations result from the Department's failure to fully integrate the Proposed Regulations into its review under the State Environmental Quality Review Act ("SEQRA"). The Department improperly treats its SEQRA review of the impacts of permitting hydraulic fracturing as a distinct process from its review of the Proposed Regulations. The Proposed Regulations are, however, part of the "Action" under SEQRA review. The Proposed Regulations should have been developed in step with the SEQRA process. They should have been revised in response to public comment on the DSGEIS and the rDSGEIS, and issued with the Final SGEIS. In the alternative, the Department could finalize the SEQRA process, and then issue proposed regulations consistent with its SEQRA Findings. It may not, as it appears to be doing here, revise the Proposed Regulations without consideration of the analysis that will underpin the Final SGEIS, including public comment on the DSGEIS.

This process violates SEQRA. It does not subject the Action to the full environmental review regimen mandated by the statute, as well as renders the Proposed Regulations premature and incomplete as they are not founded on any supporting Final SGEIS or

science. The Department also lacks important information relating to the regulatory impact of the Proposed Regulations, which is required by the State Administrative Procedure Act ("SAPA"). It does not, for example, understand or anticipate the costs for the implementation of the Proposed Regulations or their impact on small businesses and local governments. Consequently, the Proposed Regulations, in their present form, would cause significant, unmitigated adverse impacts to Otsego County's watersheds, community character, historic assets, and its economy, which is based on agriculture, organic farms, breweries, health care service providers, tourism, recreational land uses, and a second home market, all of which depend upon clean water and a healthy environment.

As the Department recognizes in its Assessment of Public Comment for the Proposed Regulations ("Assessment"), the Department is "charged with the *environmentally sound*, economic development of New York's non-renewable energy and mineral resources for the benefit of current and future generations." (Assessment, Response 4910 (emphasis added).) We respectfully submit that the Department still has not fulfilled this essential charge.

A. SEQRA

1. The Department Is Not Properly Integrating Its Review Of The Proposed Regulations Into Its SEQRA Review Of Hydraulic Fracturing

The Department states that it "disagrees" with the seemingly self-evident proposition that all comments on the DSGEIS and rDSGEIS should be deemed applicable to the Proposed Regulations. (Assessment, Response 9797.) It states that "[t]here was a separate process for public review and comment on both the draft SGEIS and proposed regulations." (Id.)

The Proposed Regulations are part of the Action that the Department needs to assess pursuant to SEQRA's procedural and substantive requirements. The Proposed Regulations are being developed arguably as mitigation measures for the adverse impacts of a permitting scheme for hydraulic fracturing. At a minimum, it is part of the relevant "Action" under SEQRA review. As such, the Proposed Regulations must be based on the factual and empirical record developed during the SEQRA process. By treating the public review of the DSGEIS and the rDSGEIS as separate and distinct from the public review of the Proposed Regulations, the Department is improperly separating its consideration of the adverse impacts of hydraulic fracturing from its consideration of a means of mitigating and/or addressing those impacts.

For the Department to fulfill SEQRA responsibilities, it must either treat the Proposed Regulations as mitigation measures that are part of the SEQRA process, or, in the alternative, complete the SEQRA process, and then develop regulations in conformance with its SEQRA Findings. This situation is analogous to the development of a comprehensive zoning

scheme pursuant to a GEIS under SEQRA. There the Lead Agency can develop the actual zoning regulations as part of the SEQRA process and/or review of the "Action," including amending the zoning as necessary in response to public comments on the DSGEIS. In that situation, any comments made on the DSGEIS would be treated as comments on the proposed zoning regulations. Thus, if a commenter, for example, correctly noted that the DSGEIS failed to properly protect sensitive resources, such as wetlands, this comment would not only be reflected in the FSGEIS, but in the final zoning regulations. In the alternative, the Lead Agency can complete the generic SEQRA process, and then draft zoning regulations based on such SEQRA analysis, risking supplementation if any of the potential impacts resulting from the actual zoning provisions were not previously examined or elaborated upon in the SEQRA record.

Otsego 2000 was an early advocate for the development of detailed, enforceable regulations for hydraulic fracturing as part of the SEQRA process, and continues to believe that the former process is most appropriate. (See 2009 Comments at 38-45.) The Department's SEQRA review is intended to inform all aspects of its consideration of permitting high-volume hydraulic fracturing, which is the "Action" for SEQRA purposes. (See rDSGEIS at 2-1 ("The proposed action is the Department's issuance of permits to drill, deepen, plug back or convert wells for horizontal drilling and high-volume hydraulic fracturing in the Marcellus Shale and other low-permeability natural gas reservoirs.").) The Department's current treatment of the Action includes the Proposed Regulations. See 6 N.Y.C.R.R. § 617.2(b) (defining "Actions" under SEQRA to include the "adoption of agency rules, regulations and procedures"). The Proposed Regulations are ostensibly a means by which the Department proposes to mitigate the subject Action. (See rDSGEIS at 7-56 (stating that all proposed mitigation measures would be "required as permit conditions and/or regulations").) As such, under the process envisioned by the Department's SEQRA review, the Proposed Regulations are inextricably linked to the Action under review as part of the SEQRA process.

In general, because comment on a SEQRA review and an Action itself are so entwined, the SEQRA regulations establish that "[w]hen a SEQR hearing is to be held, it should be conducted with other public hearings on the proposed action, whenever practicable." 6 N.Y.C.R.R. § 617.9(a)(4)(ii). In practice, when such "joint" comment hearings are held, there is no distinction between comments made on the DEIS and comments made on the underlying Action.

Moreover, as the Department is aware, in enacting SEQRA, one of the Legislature's main purposes was to ensure that regulations were adopted in conformity with environmental considerations:

> It is the intent of the legislature that all agencies which regulate activities of individuals, corporations, and public agencies which are found to affect

> the quality of the environment shall regulate such activities so that due consideration is given to prevent environmental damage.

N.Y. Envtl. Conserv. L. § 8-103(9); see also N.Y. Envtl. Conserv. L. § 8-103(8) ("It is the intent of the legislature that all agencies conduct their affairs with an awareness that they are stewards of the air, water, land, and living resources, and that they have an obligation to protect the environment for the use and enjoyment of this and all future generations.").

The environmental review compelled by SEQRA, including the public comment on the original DSGEIS and rDSGEIS, must be one and the same as the Department's development of the Proposed Regulations. (See 6 N.Y.C.R.R. § 617.1(c) ("The basic purpose of SEQR is to incorporate the consideration of environmental factors into the existing planning, review and decision-making processes of the state, regional and local governments at the earliest possible time."); see also SEQR Handbook, at 3 (N.Y.S.D.E.C. 2010) (answering, in response to the question of what the purpose of SEQRA is, that "[b]y incorporating environmental review early in the planning stages, projects can be modified as needed to avoid adverse impacts on the environment."). Failing to consider comments on the DSGEIS and the rDSGEIS when considering the Action and its related mitigation measures renders the Department's analysis of the Action/mitigation incomplete. This has resulted in Proposed Regulations that do not directly address many of the most serious adverse environmental impacts of the permitting of hydraulic fracturing, which were identified during the SEQRA process.

Under SEQRA, after the Public Hearing on a DEIS is closed, the Lead Agency typically responds to substantive comments on the DEIS in a Final Environmental Impact Statement ("FEIS"). See 6 N.Y.C.R.R. § 617.9(b)(8). SEQRA, respectfully, does not typically include an intermediate step where, like here, the Lead Agency revises the Proposed Action and/or required mitigation measures (i.e., the Proposed Regulations) without consideration of the public comments on the DEIS. The procedure being used by the Department, respectfully, appears inconsistent with the basic SEQRA tenet that the "environmental review process was not meant to be a bilateral negotiation between a developer and lead agency but, rather, an open process that also involves other interested agencies and the public." Merson v. McNally, 90 N.Y.2d 742, 665 N.Y.S.2d 605, 611 (1997). It would appear that that Department is engaged in a unilateral negotiation with itself concerning hydraulic fracturing and its required mitigation measures.

The Department needs to re-consider and revise the Proposed Regulations to reflect the Department's lawful response to substantive comments on the DSGEIS and the rDSGEIS in a Final SGEIS. The public then should be given an opportunity to review the revised Proposed Regulations. In the alternative, the Department could complete the SEQRA process and issue Findings, and then issue proposed regulations for comment once they have been revised to conform to the Department's ultimate SEQRA analysis.

Perhaps as the result of this disconnect, the Proposed Regulations do not reflect many regulatory changes recommended by Otsego 2000 and others in their previous comments. Otsego 2000, for example, had previously noted that the DSGEIS recognized that the rapid growth of hydraulic fracturing operations could adversely impact local community character, including through cumulative impacts, but advanced no mitigation measure for this significant adverse impact. (See 2012 Comments at 18-21.) Otsego 2000 recommended consideration of a regulatory scheme, similar to the Padavan Law, which would incorporate municipal input, to determine if an "excessive number" of hydraulic fracturing operations are being located in a particular community. (See id.) This recommendation does not appear to have been given any consideration.

Similarly, the Proposed Regulations show no consideration of Otsego 2000's concerns about the cumulative adverse impacts that hydraulic fracturing could cause in multiple other areas of environmental concern, including historic structures and viewsheds, fragmentation of forests and agricultural lands, threatened and endangered species, and human health and safety. (See id. at 23-26.) This is not only a SEQRA violation, but is a violation of the Department's legislatively defined responsibilities. See N.Y. Envtl. Conserv. L. § 3-0301(b) (defining the Department's responsibilities to include "taking into account the cumulative impact upon all [water, land, fish, wildlife and are] resources in making any determination in connection with . . . promulgating any rule or regulation, standard or criterion"). Again, it does not appear that the Department has considered how the Proposed Regulations could address and mitigate the significant adverse impacts of permitting hydraulic fracturing.

By way of further example, referencing Section 6.1.6.2 of the rDSGEIS, the Department continues to assert "that hydraulic fracturing does not present a reasonably foreseeable risk of significant adverse environmental impacts to potential freshwater aquifers, including via migration through faults." (Assessment, Response 3819; see also Assessment, Response 3826 ("The presence of [fracture intensification domains ("FIDS")] or faults does not mean these features are open and able to transmit fluids at depth.").) This statement demonstrates little consideration of public comment, including from Otsego 2000, rebutting this assertion. As Otsego 2000 has repeatedly advised, for example, the documented and confirmed fractures and faults in and around Otsego County are more widespread than the DSGEIS recognizes. (See 2009 Comments at 15-16 & 2012 Comments at 15-17.)

Further, the rDSGEIS concedes that "normal" drilling operations can cause methane to migrate, stating that dissolved methane and ethane "[o]ccur naturally in many aquifers but may also migrate into aquifers as a product of drilling and production." (rDSGEIS at 7-46.) The DSGEIS and, consequently, the Proposed Regulations, however, do not consider that hydraulic fracturing operations may cause methane to migrate to aquifers through pre-existing faults and fractures. Even in the absence of deep hydraulic fracturing in the Marcellus Shale, these naturally occurring fractures and faults already provide upward gaseous migration pathways. Accordingly, Otsego 2000 advised the Department to consider the vulnerability of

these areas to methane as the result of existing geological faults, and to adopt reasonable setback distances from such existing geologic faults. (2012 Comments at 16.) The Department appears to have, however, effectively rejected this proposal without any of the requisite analysis, much less a reasoned elaboration. As such, the Proposed Regulations fail to mitigate the adverse impacts of permitting hydraulic fracturing in proximity to pre-existing faults and fractures.[1]

2. The Proposed Regulations Must Also Be Informed By DOH Review

It is also inappropriate to be formulating regulations ostensibly intended to protect public health when necessary input from the Department of Health ("DOH") is concededly missing. The Department states on its website that it extended the rulemaking process "in order to give New York State Commissioner of Health, Dr. Nirav Shah, time to complete his review of the draft Supplemental Generic Environmental Impact Statement." (http://www.dec.ny.gov/regulations/77353.html.) It states that "[t]his extension is necessary, in part, because [Department] Commissioner Martens requested and [DOH Commissioner] Dr. Shah agreed to provide an additional review, in consultation with outside experts, of *whether DEC has adequately addressed potential impacts to public health.*" (Id. (emphasis added.) The formulation of the Proposed Regulations in the absence of DOH input, which the Department recognizes is necessary, is irrational.

The lack of DOH input on the Proposed Regulations renders them deficient in many respects. The Department, for example, "assumes that all hydraulic fracturing additive products, if released into the environment, pose some potential impact that depends on site-specific circumstances," but fails to differentiate between the risks that various additives could cause, individually, in combination, or cumulatively contending that "the mitigation measures for preventing exposure to hydraulic fracturing additives are not specific to the chemistry of the additives utilized." (Assessment, Response 6201.) This conclusion is prima facie irrational. Clearly, different chemicals, singly or in different combinations, pose different risks, and should be treated accordingly.

B. The Proposed Regulations Need To Incorporate All Mitigation Measures Developed Through The SEQRA Process

As noted above, many potentially critical substantive requirements set forth in the rDSGEIS remain unaddressed in the Proposed Regulations. The Department asserts,

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[1] The Department's failure to rationally consider the risks posed by faults results in deficiencies to the Proposed Regulations. The Department, for example, states that it "disagrees that seismic fractures should be included on a plat map" because "[t]he information shown on the plat is intended to assist Department staff in determining whether a proposed well meets the spacing unit and other surface setbacks." (Assessment, Response 7795.) The existence of faults, however, should inform the Department's consideration of well spacing, setbacks, and other matters related to hydraulic fracturing.

"[m]itigation measures contained in the Final SGEIS will be required and enforced as permit conditions." (Assessment, Response 3848; see also Assessment Response 4558 (same); Assessment, Response 2871 (citing to requirement in the SGEIS concerning the imposition of mitigation measures); Assessment, Response 5969 (same); Assessment, Response 5726 (same); Assessment Response 4558 ("The Department believes the SGEIS, once it is finalized, along with the Environmental Conservation Law, and the regulations will adequately protect the public, water resources and the environment.").) The Department, however, must codify all mitigation measures set forth in the SGEIS in the Proposed Regulations. Any other approach would render such mitigation measures potentially meaningless. (See 2009 Comments at 38-45.)

As Otsego 2000 previously advised the Department, by setting forth vague assurances that unspecified mitigation "recommendations" will be included in the SGEIS, presumably to be applied on a site-specific basis, the Department is relegating critical mitigation measures to a framework that will be potentially nothing more than an administrative "rubber stamp." (See 2009 Comments at 38-45.) The administrative history associated with this practice demonstrates that it is ineffective, as well as fails to ensure that local or individualized site-specific concerns are meaningfully scrutinized (either by the public or the agency) before the respective operation begins. (See id.)

The Department's concession that the Proposed Regulations will not set forth the whole range of mitigation measures being formulated in the SEQRA process also means that the Proposed Regulations will not include potentially critical requirements. The Department, for example, represents that it would address concerns that wells could be placed in proximity to faults that could allow contaminants to affect sensitive resources by "requir[ing] a 3-D seismic survey prior to hydraulic fracturing operations or active micro seismic monitoring . . . during fracturing when the proposed objective top is less than 3,000' true vertical depth." (Assessment, Response 3828, citing rDSGEIS Chapter 7.) The Department repeatedly "acknowledges that in some cases the rdSGEIS is more detailed than a proposed regulation." (Assessment, Response 3848.)

As Otsego 2000 commented earlier, the Department's attempt to impose regulatory permitting conditions through a GEIS is the essence of rulemaking, and must be submitted to the lawful rulemaking procedure, including the incorporation of all mitigation measures in the Proposed Regulations. (See 2009 Comments at 38-41.) Article IV of the State Constitution requires that any "rule or regulation" drafted by an agency be publically vetted, and then formally filed with the Department of State. See N.Y. State Constitution Article IV § 8.[2] A

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[2] In order to accomplish this, SAPA requires that the agency, at a minimum: (i) publish notice of its proposed rule; (ii) solicit public comment; and (iii) file the rule (or rules) with the Secretary of State. See N.Y. State Admin. Pro. Act § 202.

"rule or regulation" encompasses any announcement of "an agency's stated policy of general applicability which proscribes a procedure or practice requirement of the agency." Cordero v. Corbisiero, 80 N.Y.2d 771, 587 N.Y.S.2d 266, 267 (1992). The permitting conditions that the Department proposes to set forth in the FSGEIS would "proscribe[] a procedure or practice requirement of the [Department]." See id. Again, the Department must codify all mitigation measures set forth in the SGEIS in the Proposed Regulations. (See 2009 Comments at 38-45.) This requires that the Proposed Regulations either be specifically proposed as mitigation measures within the SEQRA process simultaneous with the issuance of the FSGEIS, or that the Proposed Regulations be revised after the completion of the SEQRA process, allowing all conditions in the FSGEIS and the SEQRA Findings to be incorporated into the Proposed Regulations.

Moreover, even if generally applicable regulatory procedure or practice requirements could be set forth in a GEIS and/or SEQRA Findings, the Department has not followed SAPA's procedures for lawfully implementing them. The New York State Constitution requires that the Department must undertake SAPA's formal promulgation procedures for all mitigation measures set forth in the Final SGEIS.

C. Equal Protection

The Department continues to improperly offer Upstate citizens a lower standard of protection than that proposed for similarly situated citizens who use the New York City and Syracuse Watersheds. The Department states, for example, that it "believes that the circumstances unique to [Filtration Avoidance Determinations ("FAD")] watersheds warrant the large setbacks compared to primary aquifers." (Assessment, Response 4407.) Otsego 2000 has previously advised the Department that a major flaw in its analysis, and the substance of the Proposed Regulations, is that the Department proposes special, more extensive protection for the New York City and Syracuse Watersheds. (See 2009 Comments at 12-13; see also 2012 Comments at 2-9.) The Department's efforts to rationalize this disparate treatment continues to be irrational.

In the first instance, the Department suggests that the sole basis for according special treatment to the New York City and Syracuse Watersheds involves concerns that construction related activity could adversely affect the watersheds. The Department states, for example, that "[t]he heightened sensitivity of [the NYC and Syracuse Watersheds] makes the potential for adverse impacts to water quality from sedimentation due to the significant amount of construction activity that is projected to occur during levels of projected peak activity unacceptable." (Assessment, Response 5787.) Similarly, the Department states that the Proposed Regulations "recognize that the increased industrial activity associated with well pad development, road construction and other activities associated with high-volume hydraulic

fracturing is inconsistent with the long-term protection of unfiltered surface drinking water supplies." (Assessment, Response 5787.)

Even if sedimentation from construction activities were the sole rationale for creating special setbacks from the New York City and Syracuse Watersheds, the Department still cannot explain why lesser setbacks would be acceptable for other potable water resources. As Otsego 2000 previously pointed out, the Department has not taken a "hard look" at the capabilities of filtration plants in Otsego County or elsewhere. (See 2012 Comments at 3-6 & 8-9.) The Department has no rational basis for establishing lesser setbacks for filtered water when it has no empirical evidence regarding the ability of specific filtration plants to handle substantial volumes of sediment from hydraulic-fracturing construction activities. Are the filtration plants for water in Otsego County capable of handling the elevated turbidity and/or suspended sediment levels that would result from hydraulic fracturing related activities? Would the elevated turbidity and/or sediment levels affect the operational abilities of filtering facilities and/or increase maintenance and repair costs?

Moreover, the Department cannot explain why the watersheds in Otsego County should be afforded less protection from spills than the New York City and Syracuse Watersheds. In the Assessment, the Department acknowledges that the setbacks are, in large part, intended to prevent contamination from chemical spills. (See Assessment, Response 2453 ("[S]etbacks represent an effective risk management tool in the event of a spill"); see also Assessment, Response 6136 ("Setbacks can provide the Department and/or the operator of a well the ability to respond to a spill.").) As Otsego 2000 previously pointed out, while Cooperstown and Oneonta maintain water filtration and chlorination facilities, these facilities are not designed to remove industrial wastes with dissolved contaminants or radioactive materials, such as are associated with hydraulic fracturing operations. (See 2012 Comments at 3-6.) While the filtration plant that handles Otsego Lake's water can eliminate limited volumes of sediment from drinking water, it is not designed to, and cannot, eliminate hydraulic fracturing contaminants in liquid form from water. (See id.) As the Department recognizes in the rDSGEIS, "there is no immediately available method to remove contaminants from the drinking water sources waters" once they have entered it. (rDSGEIS at 6-48.)

Nor does the Department appear to have considered factors that may make drinking water supplies in Otsego County more vulnerable to contamination than in the New York City and Syracuse Watersheds. The Proposed Regulations, for example, need to be revised to account for the fact that karst conditions exist in the northern part of the Upper Susquehanna River Watershed, which is north of Otsego Lake and Canadarago Lake (the second largest lake in Otsego County). (See 2012 Comments at 9.) Spills in karst areas can contaminate water bodies thousands of feet from a spill site in a matter of hours. (See id.)

The Proposed Regulations are also flawed because they effectively create a sliding scale for setbacks. Under the Proposed Regulations, the degree of protection accorded to a water resource is tied to the population served by that resource. (See Assessment, Response 2453 ("Consideration in setting the setbacks was given to the designated use of the water resource, such as drinking water supply (and in such cases, *population served*" (emphasis added)); see also Assessment, Response 6089 (asserting that "[t]he prohibitory setbacks are for current drinking water supplies, including unfiltered drinking water supplies and Primary Aquifers serving large numbers of residents and major municipal systems," and that "[a] site-specific SEQRA review [rather than an outright prohibition] is more appropriate for Principal Aquifers, as they generally serve smaller numbers of residents than Primary Aquifers, and other water resources that are not used as drinking water supplies.").) It is simply irrational to base the Proposed Regulations on the premise that a public health risk and/or harm is of lesser gravity because it affects fewer people.

We are unaware of any other regulatory scheme in the State that manages risk according to the size of the impacted population. Nothing in the Mineral Resources Regulations (Parts 550-559) or the Solid Waste Management Facilities Regulations (Part 360), for example, appear to suggest that areas with lower populations are afforded less protection, especially with respect to protecting water quality. If the Department believes that a setback is warranted from a water resource because it serves a larger population, there is no rational reason this same setback should not apply with full force to other water resources, even if they serve smaller populations.

The Department rationalizes this sliding scale approach by asserting, "[t]he magnitude of the setback reflects the magnitude of the potential risk and the potential harm in the event of a spill." (Assessment, Response 3807; see also Assessment, Responses 6134, 6136 (same).) The Department, however, recognizes the obvious point that greater setbacks provide greater protection, and, in fact may be the only viable means for containing spills. (See Assessment, Response 6136 ("Depending on the scope of the setback (the larger the distance the greater the protection), a spill can potentially be contained, or sufficiently delayed before reaching the water source to reduce the potential impact.").) It is unclear why this rationale should not apply equally to all potential affected sources of drinking water.

As the Assessment implicitly concedes, the provision of lesser setbacks may prevent the Department and/or an operator from preventing the contamination of water supplies from a spill. (See Assessment, Response 2453 ("Setbacks can provide the Department and/or the operator of a well the ability to respond to a spill. Thus, the magnitude of the setback should also reflect the magnitude of the potential risk and the potential harm.").)

The Department can provide no rational basis for providing aquifers that serve fewer people with lesser protection. All citizens of New York are entitled to similar protections, be they rural or city residents. Nor can this approach be harmonized with the DEC's claim that

the regulations will have no disproportionate impact on rural areas, as stated in the Revised Rural Flexibility Analysis.

D. The Department Does Not Know The Costs Of The Proposed Regulations And Does Not Have Adequate Staff To Implement Them

The Department does not rationally address the fact that: (i) it does not know the costs hydraulic fracturing would impose on State agencies, and (ii) the Department lacks adequate staff to handle a comprehensive permitting scheme for hydraulic fracturing.

1. Unknown Costs

The Department does not fulfill the basic requirement of SAPA in its consideration of the costs of the Proposed Regulations. SAPA mandates that agencies engaging in rulemaking produce "[a] statement detailing the projected cost of the rule," which, at a minimum, must set forth "its best estimate, which shall indicate the information and methodology upon which such best estimate is based." N.Y. State Admin. Pro. Act. § 202-a(c). In contrast, in its Revised Regulatory Impact Statement Summary ("Revised RISS"), the Department states that "[t]he actual costs that may be incurred by the Department and other state agencies cannot be currently estimated, given the lack of necessary information." (See Revised RISS under "State Costs".) As such, the Department is irrationally, and in violation of SAPA, considering Proposed Regulations without any definitive understanding of their cost or even a "best estimate." The Proposed Regulations would, in fact, create extreme demands on agencies, including the Department, for which it is ill prepared (as discussed below). Moreover, as also discussed in greater detail below, the Proposed Regulations would create extreme demands on local agencies, which the Department must consider.

2. Inadequate Staffing

The Department states that it "has recognized for some time that its personnel resources would be a limiting factor on the rate of development for proposals for high-volume hydraulic fracturing." (Assessment, Response 4908.) It states that "the implementation of these regulations can be expected to require a significant increase from the existing Department staffing levels to carry out the large number of activities relating to permits, with actual staffing levels dependent on the actual level of activity." (Revised RISS under "State Costs".)

Yet, as the Department recognizes, "it is not within the Department's sole discretion to either hire additional staff or increase funding (bonding)." (Assessment, Response 4908.) The Assessment states that an "advisory panel assembled to advise the Department will assess the needs of all agencies and make recommendations on staffing and funding." (Assessment, Response 4908.) In fact, an Internal Memorandum that we understand was

prepared by the former Department Commissioner, Peter Grannis, in or about October 2010 ("Grannis Memo."), cautioned that the Department is already seriously understaffed and that it is increasingly difficult for the Department to fulfill even its basic regulatory obligations due to budget shortfalls and staffing cuts. Of particular relevance, the Memorandum specifically states that "[t]here is less oversight of mine safety and oil and gas drilling, and efforts to plug leaking abandoned wells have been cut." (Grannis Memo. at 2.) We further understand that the Department has failed to locate and plug thousands of existing abandoned wells, and that most wells within its jurisdiction are rarely, if ever, adequately inspected. Thus, while the Proposed Regulations require the plugging of abandoned wells and other regulatory compliance, the reality is that, historically, such requirements have often not been implemented because the Department does not have the resources to accomplish its existing responsibilities relating to mine safety and oil and gas drilling.

Accordingly, the Department may be establishing a scenario in which it would effectively be compelled to issue hydraulic fracturing permits without the necessary resources to ensure that these permits could be issued without endangering the health, safety, and general welfare of the public or the environment. The Proposed Regulations would require, for example, that the Department "determine whether [an] application is functionally complete for purposes of department review within 10 business days after it is submitted to the department." (Proposed Regulation §560.3(e)(2).) Under existing regulations, if the Department fails to mail notice of its determination of completeness or incompleteness within the required timeframe, an application will be deemed complete. 6 N.Y.C.R.R. § 621.6(h). As the Department is aware, after a determination of completeness, the Department is further subject to relatively short timeframes for the issuance of a decision on a permit application. See 6 N.Y.C.R.R. § 621.10. The Department should not issue the Proposed Regulations if it does not have the resources to implement them.

Department Staff shortages could affect the quality of decision-making on permits and permitting in other ways as well. The Department states, for example, that "[t]he proposed placement of the well pad and access road will be reviewed by the Department in the application to drill and the [cited resources] are considered during that review." (Assessment, Response 5336.) If the Department does not have the resources to oversee its current regulatory responsibilities with respect to mine safety and oil and gas drilling, it should not undertake the onerous permitting scheme mandated by the Proposed Regulations. (See Grannis Memo. at 2.)

It would be irrational, and would violate SAPA, for the Department to issue the Proposed Regulations without any understanding of the costs for their implementation, and without the ability to implement the necessary regulatory scheme.

E. Local Governments

The Department also fails to rationally consider the costs and financial burdens that hydraulic fracturing would impose on local governments. The Department inaccurately states that "the proposed revised regulations do not mandate the expenditure of funds by any sector of local government." (Revised RISS under "Local Government Mandates"; see also Revised Regulatory Flexibility Analysis for Small Business and Local Governments ("Revised FASBLG") under "Effect of Rules" ("This revised proposal does not directly mandate the expenditure of funds by any sector of local government.").) Similarly, in the Assessment, the Department incorrectly states "[l]ocal governments are not required to take any affirmative action under the proposed rules." (Assessment, Response 3073.) The reality, as the Department elsewhere acknowledges, is that the Proposed Regulations would impose significant financial burdens on local governments.

The Department explains, for example, that "in order to be responsive to situations that could arise, local governments may want to proactively retain professional services to assist with emergency response and traffic control in certain circumstances." (Revised FASBLG under "Professional Services" see also Revised Rural Area Flexibility Analysis under "Compliance with Revised Rules" (same).) Moreover, the Department acknowledges specific costs on local governments that will be caused by hydraulic fracturing. It states, for example, that "heavy truck traffic will result in local costs for road maintenance." (Assessment, Response 3073; see also Revised Rural Area Flexibility Analysis under "Compliance with Revised Rules" ("[L]ocal governments may experience increased demand on local services, such as emergency response and local road maintenance").) The Department advances that "[l]ocal governments are encouraged to enter into Road User agreements with operators to reduce impacts on roads," (Assessment, Response 3073), but gives no indication how such agreements could reduce impacts, much less offset municipalities increased costs for road maintenance.

The Proposed Regulations themselves reference "road use agreements" in passing, but give no indication that such agreements could be used to offset a municipality's road impact costs. (See Proposed Regulation § 560.3(a)(18).) The Department makes clear that road impact costs will *not* be assumed by waste and water haulers, who will be among the entities that will cause the greatest road impacts related to hydraulic fracturing. (See Revised Rural Area Flexibility Analysis under "Minimizing Compliance with Revised Rules" ("Supporting industries, such as waste haulers and water haulers, who provide a service to well operators will have minimal costs to comply with the rules, with costs limited to paperwork requirements (e.g.

tracking waste from an HVHF well pad to a destination for disposal or reuse.").)[3]

Similarly, the Department acknowledges that the Proposed Regulations would impose costs on County Health Departments. It offers that these agencies "may need to respond to issues with [tested] residential water wells that may arise as a result of testing." (Revised RISS under "Local Government Mandates"; see also Revised Rural Area Flexibility Analysis under "Compliance with Revised Rules" ("[T]he proposed rules may require local governments to respond to additional complaints about water well quality as well owners are made aware of water well testing required by the proposed rules.").) It adds that "[t]hose costs will be compliance driven and cannot be quantified at this time." (Revised RISS under "Local Government Mandates"; see also Revised FASBLG under "Effect of Rules" ("Results of water well testing may increase complaints to the county health department regardless of whether contamination is pre-existing or attributed to nearby HVHF wells. These costs are speculative and cannot be quantified.")) Yet, many County Health Departments, and other local agencies, have limited resources, which are not considered or analyzed in connection with the Proposed Regulations.

As Otsego 2000 has repeatedly addressed, Otsego County does not have a fully staffed DOH, and would be incapable of handling the potential contaminant issues that the Department seeks to foist upon it. (See 2012 Comments at 28 & 2009 Comments at 3.) Adopting regulations without understanding the costs of their implementation or whether sufficient governmental resources exist to sustain the contemplated regulatory scheme would clearly jeopardize the public health, safety, and general welfare.

The Department also does not consider the additional costs and strain on the resources that permitting hydraulic fracturing would cause for local first responders, including fire and rescue personnel and emergency medical technicians ("EMTs"). Again, the Department recognizes that "in order to be responsive to situations that could arise, local governments may want to proactively retain professional services to assist with emergency response . . . in certain circumstances." (Revised FASBLG under "Professional Services".) As the Department surely can understand, first responders have expressed significant concerns regarding the absence of training and equipment required to safely respond to incidents relating to hydraulic fracturing,

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[3] If the Department truly intends for road use agreements to address local costs for road maintenance, consistent with Otsego 2000's previous comments, it should spell that out in the Proposed Regulations. (See 2012 Comments at 23-24.) Moreover, again, municipalities must be given reasonable time to object if the parties have failed to enter into a Local Road Use Agreement, or there exists any material deficiencies in such Agreement. Cf. 6 N.Y.C.R.R. § 621.7(b)(6)(iii). If the municipality objects to an Applicant's lack of a Local Road Use Agreement, or identifies any deficiencies in a purportedly existing Agreement, the regulations should establish that it is a prima facie "substantive and significant issue" warranting resolution in an Adjudicatory Hearing before an ALJ. See 6 N.Y.C.R.R. § 621.8(b); see also N.Y. Mental Hygiene Law § 41.34(c)(5).

including incidents that may expose them to radioactive materials. The costs and mechanics of training and equipping local first responders so that they can be responsive to situations that could arise from hydraulic fracturing operations should be addressed.

The Department also irrationally fails to consider the adverse economic impacts of hydraulic fracturing on local governments, particularly in rural areas. It "project[s] that high-volume hydraulic fracturing activities would result in a substantial increase in economic activity in the affected areas and also result in a substantial increase in tax revenues to the state and to localities." (Assessment, Response 3073; see also Revised RISS under "Local Government Mandates"); Revised Job Impact Statement under "Nature of Impact" ("The proposed revised rules themselves will not negatively affect employment opportunities, and the activities guided by the proposed revised rules will create jobs.").) The Department, however, fails to mention, much less rationally address, the adverse impacts to local economic activity that would be caused by hydraulic fracturing on the mostly rural areas affected by the Proposed Regulations. Even the Department, in the rDSGEIS, recognizes (albeit incompletely) that hydraulic fracturing could cause the contraction of sectors that are critical to Otsego County's economy, including on small businesses such as historic and other tourism, recreational land uses, breweries, organic farms, and agriculture. (See 2012 Comments at 27.) As Otsego 2000 has previously advised the Department, the contraction of tourism and other vital industries in Otsego County as the result of hydraulic fracturing could, in turn, adversely impact property values, causing a substantial decrease in County, municipal and school district tax revenues. (See 2012 Comments at 27.)

The Department's analysis and the Proposed Regulations irrationally ignore the adverse economic impacts of permitting hydraulic fracturing, specifically on smaller, less affluent rural areas, such as Otsego County.

F. The 300,000 Gallon "Threshold" For "High-Volume" Hydraulic Fracturing Is Arbitrary

The Department still does not appear to have a rational empirical basis for its claim that "[w]ells under 300,000 gallons of water do not have the same magnitude of potential impacts as high-volume hydraulically fracturing wells." (Assessment, Response 3789; see also Proposed Regulation §§ 560.1(a) (establishing that Regulations would apply only "where high-volume hydraulic fracturing is proposed") & 560.2(b)(14) (defining "high-volume hydraulic fracturing" to mean "the stimulation of a well using 300,000 gallons or more of water").) Without specific citation to any empirical or other analysis, the Department states that the 300,000 gallon "high-volume threshold" "was identified as triggering known or potential impacts that require enhanced well application information." (Assessment, Response 3789; see also Assessment, Response 3832 (asserting, without specific reference to any analysis, that "[i]t was ultimately determined by the Department that high-volume hydraulic fracturing and potential

associated impacts would not be triggered and realized until a volume of 300,000 gallons of water is reached or exceeded.").)

As Otsego 2000 has previously raised, there is no rational basis for exempting hydraulic fracturing operations involving less than 300,000 gallons from the Proposed Regulations. (See 2012 Comments at 11-13.) The sole justification for this arbitrary 300,000-gallon threshold in the rDSGEIS is that "[w]ells hydraulically fractured with less water are generally associated with smaller well pads and many fewer truck trips, and do not trigger the same potential water sourcing and disposal impacts as high-volume hydraulic fractured wells." (See rDSGEIS at 3-6.) This one sentence rationalization is an inadequate basis upon which to exclude from meaningful regulatory coverage activities that would appear to have indistinguishable impacts from hydraulic fracturing using more than 300,000 gallons of water, including potential methane leakage, conflicts with local land use plans, impacts on aesthetic and historic resources, and cumulative impacts.

G. Setbacks

The comments below on the setbacks and development limitations set forth in the Proposed Regulations supplement, and are in addition to, Otsego 2000's prior comments on the setbacks, including in its 2009 and 2012 Comments.

1. Improper Balancing In Establishing Proposed Regulations

In addition to the other problems identified above concerning the rationale for the setbacks in the Proposed Regulations, the setbacks also appear to be premised on a flawed "balancing" of the Department's obligation to safeguard the public health, safety, and general welfare, particularly as it relates to water resources. The Department states that the "[s]etbacks were developed by balancing the protection of the water resource, which is achieved by many measures in addition to setbacks, and the policy in ECL §23-301 to allow for the recovery of the natural gas resources and to protect correlative rights." (Assessment, Response 3807; see also Assessment Responses 2453, 6089, 6136 (same).)

First, this balancing approach ignores the Department's bedrock obligation to protect the environment. In enacting the Environmental Conservation Law, the Legislature declared its intent that the overriding policy of the State of New York is to protect the environment:

> The quality of our environment is fundamental to our concern for the quality of life. It is hereby declared to be the policy of the State of New York to conserve, improve and protect its natural resources and

> environment and to prevent, abate and control water, land and air pollution, in order to enhance the health, safety and welfare of the people of the state and their overall economic and social well being.

N.Y. Envtl. Conserv. L. § 1-0101(1). Moreover, the State's official policy is to promote "social, economic and technological progress for present and future generations," including by "[g]uaranteeing that the widest range of beneficial uses of the environment is attained *without risk to health or safety, unnecessary degradation or other undesirable or unintended consequences*." N.Y. Envtl. Conserv. L. § 1-0101(3) (emphasis added).

The Department is specifically responsible for carrying out the environmental policy set forth in Environmental Conservation Law Section 1-0101. N.Y. Envtl. Conserv. L. § 3-0301. Moreover, the Department can only engage in balancing that is "consistent with the environmental policy of the state." N.Y. Envtl. Conserv. L. § 3-0301(b). Thus, the Department cannot engage in balancing that would pose "risk[s] to health or safety, unnecessary degradation or other undesirable or unintended consequences." N.Y. Envtl. Conserv. L. § 1-0101(3)

Consistent with this requirement, Environmental Conservation Law Section 23-301, in pertinent part, unambiguously declares it to be in the public interest, in connection with the utilization of natural resources, to ensure "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.) Thus, the legislative intent of the Mineral Resources Law is that the rights of all persons to safe drinking water are to "be fully protected," without compromise.

Indeed, the legislative policy behind the Water Resources Law, Article 15 of the Environmental Conservation Law, also shows that the intent is to provide for the unconditional protection of water resources. Environmental Conservation Law Section 15-0105 establishes that it is the express policy of the State that "[t]he waters of the state be conserved and developed for all public beneficial uses." Furthermore, "water resources [shall] not [be] wasted and shall be adequate to meet the present and future needs for domestic, municipal, agricultural, commercial, industrial, power, recreational and other public, beneficial purposes." N.Y. Envtl. Conserv. L. § 15-0105(3).

Moreover, it is the policy of the State that "[t]he acquisition, storage, diversion and use of *water for domestic and municipal purposes shall have priority over all other purposes*." N.Y. Envtl. Conserv. L. § 15-0105(5) (emphasis added). Finally, and perhaps most importantly, the policy of the State is that, even in connection with "the industrial development of the state," it is the legislative intent "to *require the use of all known and available and reasonable methods to prevent and control pollution, wastage and unreasonable disturbance and defilement of the waters of the state*." N.Y. Envtl. Conserv. L. § 15-0105(7) (emphasis added).

Accordingly, the Department's Proposed Regulations appear flawed, as they seem to accord mineral development equal weight to environmental protection. As multiple provisions of the Environmental Conservation Law make clear, however, the Department's overriding responsibility is to protect the environment and that responsibility must not be compromised.

2. Specific Issues Pertaining To Proposed Regulations

First, the Department should revise the Proposed Regulations so that the setback prohibitions apply with equal force to subsurface drilling, as well as to well pad development. The Department states that "[t]he 4,000-foot buffer [for the New York City and Syracuse Watersheds] is with respect to well pads and is not a prohibition of horizontal drilling under the buffer or the watershed itself." (Assessment, Response 3837.) Otsego 2000 presumes that this statement applies to all setbacks, such that the requisite setbacks now apply only to well pad development, and not to horizontal drilling in sensitive areas. This approach, if accurate, would indicate that the Department is irrationally ignoring the risks posed by the subsurface migration of contaminants from hydraulic fracturing.

As Otsego 2000 has previously pointed out, hydraulic fracturing could cause the subsurface contamination of water supplies. (See 2009 Comments at 15-18 & 2012 Comments at 13-17.) Pre-existing fault and fracture networks, for example, could be exacerbated and/or integrated by hydraulic fracturing, and serve as upward contaminant release vectors for gas and contaminant-laden hydraulic fracturing fluids. (See 2009 Comments at 15-16 & 2012 Comments at 15-17.)[4]

Moreover, the Department's analysis of the Proposed Regulations, and the Proposed Regulations themselves, appear to implicitly recognize the risk posed by subsurface contamination. In the Assessment, for example, the Department acknowledges that a State Pollutant Discharge Elimination System ("SPDES") Permit would be required for hydraulic fracturing precisely because it involves discharges to subsurface "saturated zones:"

> ECL §17-701 requires a SPDES permit for anyone to "[m]ake or cause to make use any outlet or point source for the discharge of sewage, industrial waste or other wastes or effluent therefrom, into the waters of the state." 6 NYCRR 750-2.1(a)(40) defines groundwater as "waters in the saturated zone. The saturated zone is a subsurface zone in which all the interstices are filled with water under pressure greater than the atmosphere.

[4] As noted above at footnote 1, the Department's failure to rationally consider the risks posed by faults results in deficiencies in the Proposed Regulations.

Although the zone may contain gas-filled interstices or interstices filled with fluids other than water, it is still considered saturated."

(Assessment, Response 5786.) Consistent with its acknowledgement that hydraulic fracturing involves the discharge of chemical laden water into subsurface groundwater, the Proposed Regulations must recognize the risk posed by these subsurface discharges.

The Proposed Regulations also would establish that injecting water for hydraulic fracturing does not require a SPDES Permit if, *inter alia*, "the department determines that such injection will not result in the degradation of ground or surface water resources." (Proposed Regulation § 750-3.5(b)(2).) The Proposed Regulations, in turn, require that in order for the Department to make a determination that an injection will not result in the degradation of ground or surface water resources, at a minimum, "the top of the target fracture zone, at any point along any part of the proposed length of the wellbore, for HVHF must be deeper than 2,000 feet below the ground surface and must be deeper than 1,000 feet below the base of a known freshwater supply." (Proposed Regulation § 750-3.5(c)(1).) Initially, it is irrational to assume that a depth of 2,000 feet below surface is sufficient in all circumstances to prevent the upward migration of methane or hydraulic fracturing fluids to ground or surface water without regard to site specific considerations such as faults, topography, abandoned wells, casement failure, and other risks. In any event, the fact that the Department would only be able to determine that a hydraulic fracturing injection would not degrade water resources provided it is a certain depth *below* the ground surface and freshwater supplies implicitly recognizes that there is a risk of contaminant migration upward from the fracture zone.

Elsewhere in the Assessment, the Department's Responses also implicitly acknowledge that the setbacks are, in part, intended to prevent the subsurface migration of contaminants into drinking water supplies. In Response 6954, for example, in response to a comment on the setbacks for aquifers, the Department states that "[i]n addition to the requirement that owner or operator conduct residential water well testing in accordance with the requirements of 6 NYCRR 560.5(d), the revised regulations at 6 NYCRR 750-3 require an approvable groundwater monitoring program be developed and implemented." The Department adds that "the rdSGEIS discusses mitigation measures to protect groundwater resources from contamination due to migration of fluids and gas." (Assessment, Response 6954.) The Proposed Regulations must be revised so that the risk posed by subsurface migration of contaminant informs all aspects of the permitting scheme.

Related to this problem, the Department places certain limitations pertaining to the proximity of hydraulic fracturing to drinking water resources in the Proposed Regulations relating to obtaining a permit under the SPDES permitting for hydraulic fracturing (Proposed Subpart 750-3). The setbacks requiring individual review for Principal Aquifers, Wetlands,

Streams, Lakes, and Ponds are only set forth in the proposed SPDES regulations for hydraulic fracturing. (See Proposed Regulation § 730-3.11(d).)[5] These limitations should also be set forth in the Proposed Regulations pertaining specifically to hydraulic fracturing *operations* (Proposed Part 560). Again, the placement of these requirements only in the SPDES regulations appears to ignore the risk to these resources from hydraulic fracturing operations themselves.

The Department should also clarify the distinction, if any, between a "Public Water Supply," a "Primary Aquifer," and a "Principal Aquifer." (See Proposed Regulation §§ 560.2(b)(20), (21), & (25).)[6] This clarification is important because the Proposed Regulations would prohibit well pads within 2,000 feet of a Public Water Supply, but only 500 feet from a Primary Aquifer, and would only require individualized SPDES review for proposals within 500 feet of a Principal Aquifer. (See Proposed Regulations §§ 560.4(a)(3), 560.4(a)(5) 20), & § 730-3.11(d).) It would appear that any Principal or Primary Aquifer used by or in connection with a Public Water Supply should benefit from the larger setbacks accorded to Public Water supplies. Any Aquifer used as part of a system that provides piped water to the public for human consumption should be protected, at a minimum, by the 2,000-foot setback for Public Water Supplies. Similar setbacks should also be imposed for private wells supplying drinking water to homes, farms and businesses.[7]

In addition, there is no rationale for allowing waivers or variances from the 500-foot setback requirements for residential wells, inhabited dwellings, and places of assembly. (See Proposed Regulation § 560.4(c).) The Department states that it "does not agree that a decision by a landowner to waive the 500-foot setback will endanger the water quality for the aquifer." (Assessment, Response 4405; see also Assessment, Response 6136 (noting "that the proposed Part 560.4 has been revised to permit reasonable well location variances to the setbacks

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[5] Similarly, the 4,000-foot buffer for the New York City and Syracuse Watersheds is only set forth in the proposed SPDES regulations for hydraulic fracturing. (See Proposed Regulation § 730-3.3(a)(1).)

[6] The Proposed Regulations define a Public Water Supply to "mean either a community or non-community system which provides piped water to the public for human consumption if the system has a minimum of five (5) service connections, or regularly serves a minimum average of 25 individuals per day at least 60 days per year." (Proposed Regulation § 560.2(b)(25).)

The Proposed Regulations define a Primary Aquifer to "mean a highly productive aquifer presently being utilized as a source of water supply by a major municipal supply system." (See Proposed Regulation § 560.2(b)(20).)

The Proposed Regulations define a Principal Aquifer to "mean an aquifer known to be highly productive or whose geology suggests abundant potential water supply, but which is not intensively used as a source of water supply by a major municipal system at the present time." (See Proposed Regulation § 560.2(b)(21).)

[7] At a minimum, well pads should be prohibited from the radius of pumping influence of all wells, public or private. (See 2009 Comments at 21.)

from certain private water wells, inhabited dwellings and places of assembly where written consent has been given by potentially affected landowners").) The Department ignores its own evaluation, which indicates that a 500-foot buffer from private wells and residences is necessary to protect the public health, safety and welfare. (See rDSGEIS at 7-73.)

The Proposed Regulations also do not address the need for additional setbacks and heightened scrutiny for environmentally sensitive and historic sites to avoid the adverse impacts of heavy industrialization on these sites and agricultural lands. The Department agrees to provide for enhanced protection for Park lands, so it is not clear why such considerations should not apply with equal force to other areas of scenic and historic significance. (Assessment, Response 2871; see also Assessment, Response 5858 with respect to additional protections for blocks of habitats identified in "Grassland and Forest Focus Areas.")

The Department acknowledges that "the anticipated surface impacts relating to forest fragmentation, increased truck traffic, noise and light pollution could degrade wildlife habitat and public recreation experiences of New Yorkers." (Assessment, Response 5915.) It further notes that "many State forest roads," like many rural roads, "serve as recreational trails" for recreational users including bicyclists, horseback riders, and others. (Assessment, Response 5915.) It notes that "[t]he level of truck traffic associated with high volume hydraulic fracturing could present potential safety issues, and could significantly degrade the experience for users of these roads." (Assessment, Response 5915.) These same considerations and protections should be included in the Proposed Regulations for sensitive rural communities.

Otsego 2000, in particular, has repeatedly urged the Department to provide greater protection for properties eligible for listing or listed on the State or National Registers of historic places and on any sites designated as environmentally significant by local communities. (See 2009 Comments at 33-34 & 2012 Comments at 21-23.) As previously stated, and as reiterated below, municipalities should be given specific, reasonable notice of every complete application for drilling or hydraulic fracturing within their jurisdictions. See 6 N.Y.C.R.R. § 621.7(a)(1). Where the application is not prohibited by local legislation, municipalities should be given a reasonable amount of time to identify significant aesthetic and historic resources in the area of any proposed hydraulic fracturing operation. Cf. 6 N.Y.C.R.R. § 621.7(b)(6)(iii). If a municipality identifies a significant aesthetic resource in the area of any proposed operation, which the municipality can demonstrate through substantial evidence, could be significantly adversely impacted by such operation, the regulations should establish that it is a prima facie "substantive and significant issue" warranting resolution in an Adjudicatory Hearing before an ALJ. See 6 N.Y.C.R.R. § 621.8(b); see also N.Y. Mental Hygiene Law § 41.34(c)(5).

Finally, the Department needs to reconsider the accuracy of the 100-year floodplain maps upon which it relies and/or extend the prohibition against hydraulic fracturing to the 500-year floodplain. As Governor Andrew Cuomo stated in his recent State of the State address, the reality is that the so-called "100-year flood" is occurring far more frequently as the result of climate change:

> Climate change is real. It is denial to say each of these situations is a once-in-a-lifetime. There is a 100-year flood every two years now. It is inarguable that the sea is warmer and there is a changing weather pattern, and the time to act is now.

(Danny Hakim, "Cuomo Calls for State to Return to Progressive Ideals," N.Y. Times, Jan. 10, 2013.) The Proposed Regulations should be revised to reflect the fact that, as the result of climate change, the 100-year floodplain is more expansive than is indicated on current maps.

H. Certain Chemicals May Pose Unacceptable Risks

The Department states that "prohibiting specific chemicals or additives is not necessary" because "[r]egardless of additive composition, the potential impacts from the chemicals utilized in hydraulic fracturing are mitigated by the required design and operational controls to prevent releases and exposures." (Assessment, Response 6121; see also Assessment, Response 6201 (stating, with respect to Proposed Regulation § 560.6(c)(23), that the Department "does not agree that verification through sampling and chemical analysis is necessary to ensure no adverse health impacts because the mitigation measures for preventing exposure to hydraulic fracturing additives are not specific to the chemistry of the additives utilized").) It is unclear how the Department could come to this conclusion: (i) while it is still awaiting comment from the State DOH; (ii) when it still does not know the specific chemicals and additives that will be used, and (iii) when it is a matter of common scientific knowledge that exposure to chemicals in combination or over long periods of time may produce different, far more serious impacts than those experienced through single or intermittent exposure. Clearly there may be chemicals and/or additives that pose unacceptable risks to the public health, safety, and welfare, and to the environment when used singly or in combination. The Department should assess all chemicals proposed to be used for hydraulic fracturing and determine if any pose unacceptable risks to the public and/or the environment singly, in combination and/or cumulatively. Such limitations and analysis should be reflected in the Proposed Regulations.

I. SPDES Non-Compliance Should Result In A Stop-Work Order

The Proposed Regulations state that "[u]pon a finding of significant non-compliance with the Comprehensive SWPPP, the department *may* order an immediate stop to all

activity at the well until the non-compliance is remedied." (Proposed Regulation § 750-3.11(l)(3) (emphasis added).) Any "significant non-compliance," however, evidences a failure to conform to basic measures intended to safeguard the public health, safety, and general welfare, and presumptively presents unmitigated adverse impacts. There should be no discretion to allow activities to continue in the event of significant non-compliance. The Proposed Regulations should be revised to state that "the department *shall* order an immediate stop to all activity" until a significant non-compliance is remedied.

J. Municipalities Deserve Specific, Reasonable Notice

The Proposed Regulations still fail to provide adequate provision for public comment from impacted municipalities. The Proposed Regulations would only provide a public notice period on a draft permit of fifteen (15) days from publication of notice in the Environmental Notice Bulletin. (Proposed Regulation §560.3(e)(5).) In the Assessment, the Department states that the Proposed Part 560.3 "has been revised to provide a notice period during which local officials could inform the Department of local and site-specific issues," including in such critical areas as whether there are "areas outside the 100-year floodplain that are known to be susceptible to flooding." (Assessment, Response 6131.) In the first instance, as Otsego 2000 has previously advised, the Department and/or an Applicant should be obligated under the Proposed Regulations to provide the affected municipality with direct, specific notice of any hydraulic fracturing application within its jurisdiction. (See 2012 Comments at 18.)

Again, every hydraulic fracturing application should be deemed a "major" application, requiring the Department to automatically notify the affected municipality of the subject application. See 6 N.Y.C.R.R. § 621.7(a)(1). The Department must then provide it with a minimum of thirty (30) days to comment upon the application and alert the Department to particular local issues. Cf. 6 N.Y.C.R.R. § 621.7(b)(6)(iii) (establishing that municipalities have thirty (30) days to comment from publication).

K. Cumulative Impacts On POTWs And Drinking Water Sources Need To Be More Fully Considered

The Proposed Regulations also need to consider the cumulative impact of hydraulic fracturing wastewater disposal that may be treated at publicly owned and other treatment works. In Assessment Response 3781, the Department states that the publicly owned treatment works ("POTW") headworks analysis is aimed at determining if HVHF wastewater "would not comply with the pass through and interference provisions in 40 CFR Part 403.5." In turn, 40 C.F.R. 403.5(p) establishes that the term "Pass Through means a Discharge which exits the POTW into waters of the United States in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any

requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation)." The Department needs to consider the cumulative impact of the discharge from POTWs of large volumes of wastewater. The Susquehanna River Watershed, of which Lake Otsego is the headwaters, for example, is one of the oldest and most significant water systems in the country. It delivers drinking water to millions of people on the eastern seaboard. It is irrational to consider the massive "pass through" of hydraulic fracturing waste into this water system without a comprehensive cumulative impacts analysis of all of the health and property damage risks. It does not appear that the Department has ever considered how much wastewater will be generated if hydraulic fracturing is allowed, and what the cumulative impacts would be. The Department, respectfully, needs to consider the cumulative impact of the discharge of wastewater in the Proposed Regulations.

The Proposed Regulations should also be clarified to require headworks analysis for each tank-load or delivery of wastewater, which we believe is the Department's intention. (See Proposed Regulation § 750-3.12(c)(2) ("Prior to being permitted to accept HVHF wastewater, the POTW must perform a headworks analysis for the HVHF wastewater and submit the analysis for review and approval by the department and EPA.").) Testing of each batch of wastewater should be required because each batch of hydraulic fracturing wastewater will likely contain unique contaminants.

Similarly the Proposed Regulations do not state where hydraulic fracturing wastewater will be stored while the headworks analysis is performed, and where it will be disposed of in the event it does not meet the POTW's permit requirements. These matters are extremely significant when dealing with millions and potentially billions of gallons of contaminated fluids.

L. Groundwater Monitoring

The Proposed Regulations indicate that groundwater monitoring would only be required at the discretion of the Department. (See Proposed Regulation § 750-3.7(o).) As the rDSGEIS states, however, "[t]esting at established intervals after drilling or hydraulic fracturing operations provides opportunities to detect contamination or confirm its absence." (rDSGEIS at 7-45.) The Proposed Regulations should require regular monitoring of all wells and water resources required to be tested in advance of the commencement of hydraulic fracturing operations. (See Proposed Regulation § 560.5(d).) This requirement should be set forth in Subpart 560.

M. Consideration of Alternatives Is Also Inadequate

The Department's consideration of alternatives in the Revised RISS is also flawed. Another alternative that should have been considered is a requirement for site-specific review of all hydraulic fracturing permit applications in the State. There are many variances discussed in the Proposed Regulations and the Department's stated intent is to permit hydraulic fracturing through site-specific conditions across a multitude of issues. As such, it is apparent that hydraulic fracturing proposals require such individualized consideration that they should not be permitted based on a GEIS or overbroad regulations. (See, e.g. Assessment, Response 6112 ("Review of an application to drill a well will address wetlands, streams and habitats work on a case by case basis as part of the comprehensive review."); see also Assessment, Response 6121 ("The approach taken in the proposed regulations assumes that hydraulic fracturing fluid additives, if released in the environment, may pose some potential impact that depends on site-specific circumstances.").)

Thus, the Department admits it will conduct site-specific review with respect to numerous significant issues without participation by the public or affected parties. The Department appears to concede that site-specific environmental review is necessary to allow consideration of certain local and regional environmental concerns, including unique local conditions and visual resources. The alternative of requiring site-specific SEQRA review for all HVHF permits applications should be specifically addressed.

CONCLUSION

As Otsego 2000 has previously advised, until the public is given an opportunity to comment upon a complete "document," which here means the Final SGEIS and the final Proposed Regulations, the public has not been given its lawful right to a meaningful public hearing. (See 2012 Comments at 30, citing In re Amenia Sand & Gravel, 1997 WL 1879249, at *8 (DEC File No. 3-1320-00030/2 June 16, 1997) (Rulings of the Administrative Law Judge on Party Status and Issues), appeal denied, 1997 WL 628371 (N.Y. D.E.C. Aug. 27, 1997) (Interim Decision of Deputy Commissioner).)

The Department, respectfully, should either revise the Proposed Regulations to directly respond to the public comment on the rDSGEIS and/or revise the Proposed Regulations after the completion of the SEQRA process. In either scenario, it should allow additional time

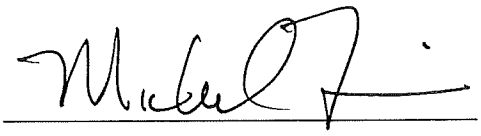
for the public to comment on the Proposed Regulations after the finalization of the SGEIS.[8]

Please do not hesitate to contact Otsego 2000 should the Department have any questions or comments, or would like Otsego 2000 to expand on any of the areas discussed herein.

Dated: January 10, 2013
White Plains, New York

Respectfully,

ZARIN & STEINMETZ

By: 

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[8] Inasmuch as the ten (10) day "cooling off" period following the issuance of an FEIS does not automatically trigger a public right to comment, see 6 N.Y.C.R.R. § 617.11(a), the Department, respectfully, should make special provisions to ensure that the public has an opportunity to comment on the revisions that the Department must make to its analysis in the Final SGEIS and the Proposed Regulations. See Webster Assocs. v. Town of Webster, 59 N.Y.2d 220, 464 N.Y.S.2d 431, 433 (1983).

Signatories

UPDATED LIST OF SIGNATORIES
to
Otsego 2000's January 13, 2013
Comment Letter to the Department of Environmental Conservation
on the Proposed Regulations Pertaining to Well Permit Issuance for
Horizontal Drilling and
High-Volume Hydraulic Fracturing

Advocates for Cherry Valley, Inc., by Lynn Marsh and Andy Mining
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Advocates for Morris, by Maureen Dill
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Center for Sustainable Rural Communities, by Robert Nied
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Concerned Burlington Neighbors, by Suzy Winkler
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Concerned Citizens of Otego, by Carolee Byrnes
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Concerned Worcester Citizens, by Clarke Rhoades
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First Presbyterian Church of Cooperstown, by Rev. Elsie Rhodes, Pastor
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Friends of Butternuts, by Teresa Winchester
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Middlefield Neighbors, by Kim Jastremski
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Milford Defenders of Our Environmental Resources (DOERS), by Otto Butz
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Barbara Monroe
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Maryland Residents Against Drilling, By Allison Jones
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New Lisbon Neighbors, by Nancy Moen
New Lisbon, NY

Otsego Neighbors, by Julie Huntsman
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Protect Richfield, by Susan Huxtable
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