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January 11, 2012

Attn: dSGEIS Comments
New York State Department of Environmental Conservation
625 Broadway
Albany, NY 12233-6510

Re: **DEC Public Hearing on High-Volume Hydraulic Fracturing:**

(1) the Revised Draft SGEIS on the Oil, Gas and Solution Mining Regulatory Program (September 2011), Well Permit Issuance for Horizontal Drilling and High-Volume Hydraulic Fracturing in the Marcellus Shale and Other Low-Permeability Gas Reservoirs (**dSGEIS**); (2) the proposed State Pollutant Discharge Elimination System (**SPDES**) General Permit (**GP**) for Stormwater Discharges; and (3) the High Volume Hydraulic Fracturing **Proposed Regulations** 6 NYCRR Parts 52, 190, 550-556, 560, and 750

To Whom It May Concern:

The Bronx Council for Environmental Quality, (BCEQ) is a non-profit membership organization located in New York City's only mainland borough—the Bronx. We are a diverse collection of individuals all seeking to leave our great-grandchildren better air, land, and water quality than we have at present.

We believe the City's drinking water supply is why we have the greatest pizza, the best bagels worldwide, and an unfiltered excellent tap water. We believe we should protect this precious resource, and that your agency is compelled to do whatever necessary to do so. We are happy that you have accepted the idea that the drinking watershed is exempt from the regulations allowing the fracturing industry to move forward. We are unhappy that you feel that fracturing can be used in other parts of the State without impacting the drinking water supply of NYC.

GENERAL COMMENTS

For many years, BCEQ members were active in commenting on environmental reviews concerning NYC's drinking water watershed protection programs, particularly on large projects impacting clean drinking water. This taught us two very important points. The first is that all water bodies of the United States are interconnected – meandering through wetlands, streams, lakes, and rivers, in a fashion that can not be easily identified: That is why we have to protect wetlands; even isolated ones. Just this past year, it was reported¹ that rain water from an inland ponds, known as prairie potholes, reached a large waterbody in four years! (see article: ????)

The second point is that the Stormwater Pollution Prevention Plan (SWPPP) belongs in the Environmental Impact Statement (EIS), along with the Soil and Erosion Control Plan (SESCP); this is so the public can review it and comment on it. The NYC DEP did it in the Filtration Plant environmental assessment. The NYS Department of Transportation (DOT) did it in the review of the expanded highway system 120/684/22 in Westchester County. In that project, one of our Directors was a member of the New York State Department of Transportation Stormwater

Pollution Prevention Plan Advisory Committee on the 120/22/684 Project. We learned some very important lessonsⁱⁱ, and we had hoped that the State DEC had learned these too!

It is because of these two reasons that we request an Environmental Justice (EJ) Review of the impact of this project on the Ten Million New Yorkers who drink from the NYC drinking watershed, many of whom are low-income and minority populations. It is not adequate to do an EJ review for upstate New Yorkers and not for the people down stream who may be impacted by the pollution caused from allowing hydrofracturing of the type described.

The HVHF dSGEIS, SPDES GP for Stormwater Discharges, and the Proposed Regulations have fatal flaws. It does not protect the waterbodies of the United States, and New York State; the SWPPP is not in the draft Generic EIS, nor is the SESCO, making it difficult for the public to ascertain whether or not interconnected waterbodies are protecting our drinking water supply or not!

SPECIFIC COMMENTS – *Italics identifies the section and a short description with endnotes.*

1. **6 NYCRR 52.3** – *Since the prohibition does not protect subsurface resources located under State Landsⁱⁱⁱ, we suggest: the State of New York and its citizens should be compensated for removal of subsurface resources located under State Lands. What about assessing the impacts on these resources?*
2. **Section 550.2** – *In addition to the positions identified in Section 550.2^{iv}, we suggest a Statewide Hydraulic Fracturing Monitoring Committee should be appointed comprising at least one citizen representative from each of the several NYS DEC regions as well as one representative each from Riverkeeper, Sierra Club, Natural Resources Defense Council, Environmental Defense Fund, Scenic Hudson and/or other environmental groups. The [chief] director of the Division of Mineral Resources shall be an ex officio member along with the Regional Director, U.S. EPA, and the Commissioners of NYS DEC and NYC DEP and/or his or her designee. Such committee shall meet at least monthly and shall advise the [chief] director of the Division of Mineral Resources on actions to preserve and protect the resources of the State of New York with special regard to the avoidance of any significant impacts on the New York City water supply system from High Volume Hydraulic Fracturing activities.*
3. **Section 551.6** – *The required financial security in the revised Section 551.6^v is totally inadequate to protect the State, its citizens and its environment from a catastrophic event at any one well site. Additionally, company owners should be required to file financial security for each well regardless of the number of wells. [It is recommended that the State be named insured for an environmental liability policy not less than two million dollars for each well.]*
4. **Section 552.1 Subdivision (a) and (b)**^{vi} – *this section does not require permit for deepening or plug back operations. Applications and permits shall be required for all activities including deepening or plug back operations that represent a significant change from any such activities addressed in a related permit for the well in question. Applications are not needed for some of the revised subdivisions of Section 552.1 for deepening or plug back operations.*^{vii}
5. **Section 552.1 Subdivision (c)** – *This section concerns re-fracturing.*^{viii} *In addition to this application, the owner or operator shall certify that there have been no significant changes at*

the well site in question that would impact re-fracturing operations or that might reasonably be anticipated to lead to any significant environmental impact not addressed or mitigated in the original permit for the well.

6. **Section 552.1 Subdivision [(e)] (f)** – *This section allows the use of verbal authority in case of an unusual or emergency situation.*^{ix} This section needs to be deleted – under no circumstances should anyone be able to rely upon “verbal authority”. Additionally, the granting of such authority would not be in accordance with SEQRA and represent improper delegation of authority.
7. **Section 553.1** – *This section is revised to identify statewide spacing.*^x This spacing section contains no mention of proximity to natural resources but rather references unit boundaries. Revisions should be included to prevent unreasonable well density in or proximate to sensitive environmental areas including but not limited to wetlands as defined by the NYS DEC and/or applicable local laws and any natural resource with a hydraulic linkage to the NYC water supply system. Well spacing shall take into account scaled distance from the proposed surface location of the well and the closest edge of proposed well pad to any primary or principal aquifer boundary, perennial or intermittent stream, wetland, storm drain, lake or pond within 660 feet, and any surface water body within 660 feet that is a tributary to a public drinking water supply.
8. **Section 553.4** – *This section is revised concerns significant impact and public hearing comments.*^{xi} The department itself should be able to raise its own substantive and significant issues and shall be required to make a finding of no significant impact even in the absence of any public comments or comments that do not raise substantive and significant issues. One can't presume all is OK just because no one shows up for a hearing.
9. **Part 554, Drilling Practices and Reports** – *Section 554.1 (c) states drilling muds are not polluting fluids.*^{xii} It is totally unreasonable to exempt drilling muds (which are loaded with the hydrofracking chemicals) from the requirement to be disposed of in an environmentally safe and proper way. This implies that such drilling muds are safe regardless of disposal method. Such a determination and exemption is arbitrary and capricious.
10. **Section 555.5 (a) (5) is revised.** In this section^{xiii} [heavy mud-laden] is in brackets – is it part of the regulation or not? Additionally, 8.65 pounds per gallon is roughly the density of water. It would seem that something more substantial than muddy water is envisioned here so this section requires technical review and editing, as appropriate.
11. **Section 560.3 (c)** – Add (vii) an analysis of any potential adverse environmental impacts (e.g. LD50, etc) for the fracturing fluid and the condition and concentrations in which it will be used at the well site.
12. **Section 560.3 (d) (1)**^{xiv} - Wells should also be tested for all components of the fracturing fluid disclosed in the permit application.
13. **Section 560.3 (d) (1) (i)** – *This section identifies acceptable well control barrier policy shall will be developed.*^{xv} What is acceptable, and acceptable to whom? The well control barrier shall be reviewed and accepted by the department.

14. **Section 750-3.3 - Prohibited Activities and Discharges (b) HVHF operations on the ground surface are prohibited in the following areas:** This section should be amended to read “on the ground surface and subsurface” – additionally, “within 500 feet of, and including, a primary aquifer” is not restrictive enough – this needs to be at least 1000 feet. (which of course isn’t enough if the water runs down gradient....)

15. **750-3.21 HVHF SPDES general permits (f)(4) – has the following table.**

(4) HVHF operations sited within the following buffers (calculated from the closest edge of the gas well pad):

Principal Aquifer	500 feet
Private Water Wells	500 feet[1]
Wetland	100 feet
Storm drains, lakes, or ponds, and perennial or intermittent streams, as described in 6 NYCRR Parts 800-910 P	150 feet
Perennial or intermittent streams, as described in 6 NYCRR Parts 800-910, and that are tributary to surface public drinking water supplies.	500 feet

[1] This setback applies unless waived in writing by well owner.

These numbers are not enough. Amend the table per above to 1000 feet for private wells and aquifers; for wetlands add: 100 ft (or greater if required by local regulation – e.g. an environmental protection overlay district).

In conclusion, it is disheartening to say the least, that your agency has found it necessary to monitor and evaluate the effectiveness of using Green Infrastructure to abate Combined Sewer Overflows, but not one serious question of this destructive and poisonous activity. Green Infrastructure can not hurt anyone; fracking is making people sick, polluting wells and water courses, and the waste product seems to be causing earthquakes. .

Thank you for this opportunity to comment. Please respond with your review, and if you find it necessary to issue a Findings Statement, please send us a copy of it as soon as possible.

Sincerely,

Karen Argenti

Karen Argenti
BCEQ Communications Committee Chair

Dart Westphal

Dart Westphal
BCEQ Water Committee Chair

C: Elected officials, Media, www.bceq.org

TABLE A: Summary developed by the Environmental members of the New York State Department of Transportation Stormwater Pollution Prevention Plan Advisory Committee on the 120/22/684 Project.

How to Attenuate, Convey, Pre-Treat, Treat & Polish Stormwater Runoff in a highway project at reservoirs of the NYC Watershed, or things we agreed to in the Route 120 project:

1. No untreated discharges to the Reservoir within the limits of the highway project.
2. Multi-barrier watershed approach reduces pollutant loads from existing conditions.
3. Practices are arranged in “series” providing a “treatment train” prior to discharge from the project site.
4. Design provides oil spill/containment treatment.
5. Design includes both structural and nonstructural components compatible with the natural and constructed features of project site.
6. No net increase of pavement surfaces from this project within the watershed basin.
7. Natural water capture vegetated landscape and street cleaning are on the treatment train.
8. The Soil Erosion & Sediment Control Plan (SESCP) is limiting and confining the extent of disturbance to protect natural vegetation.
9. The SESCP includes a contingency plan that will minimize the possibility of stormwater turbidity from a significant storm event or by the failure of the proposed erosion protection measures.
10. A full time independent environmental monitor will oversee the construction of the project.
11. The NYSDOT Region 8 annual stormwater facilities maintenance contract will be used to maintain the stormwater facilities.
12. Mitigated wetlands must be in the same watershed basin. Mitigated wetland impacts will be monitored for 10 years.

ⁱ “The study, to be published in the journal *Wetlands*, shows that at least 17 percent of the water that fell on these inland ponds — also known as "prairie potholes" - reached a navigable waterway over a four-year period.”
http://switchboard.nrdc.org/blogs/jdevine/shocker_wetlands_connected_to.html *Evidence of Surface Connectivity for Texas Gulf Coast Depressional Wetlands*, by Bradford P. Wilcox & Dex D. Dean & John S. Jacob & Andrew Sipocz, (Received: 8 June 2010 / Accepted: 10 February 2011 # Society of Wetland Scientists 2011),
(<http://www.urban-nature.org/publications/documents/2011WilcoxWetlands.pdf>)

ⁱⁱ See **TABLE A** at the end of this letter. It was formed by the Environmental members of the New York State Department of Transportation Stormwater Pollution Prevention Plan Advisory Committee on the 120/22/684 Project, including NRDC and others.

ⁱⁱⁱ **6 NYCRR 52.3** “...This prohibition [against surface disturbance], however, does not include subsurface access to subsurface resources located under State lands from adjacent private areas...”

^{iv} **Section 550.2** is revised to read: a) to carry out the functions outlined in section 550.1 of this Part, the Department of Environmental Conservation has created a [Bureau] Division of Mineral Resources. (b) The [Bureau] Division of Mineral Resources is headed by a [chief] director who is responsible for the administration and enforcement of all rules, regulations, orders and amendments thereof of the Department of Environmental Conservation relating to the exploration and drilling for, and production, transportation, purchase, processing and storage of oil and gas and the prevention of any pollution resulting therefrom. (c) The [chief] director of the Division of Mineral Resources shall be responsible for the directing, supervising and proper performance of the Division of Mineral Resources.

^v **Section 551.6** is revised to read: The owner of an oil, [and] gas or solution mining , storage, stratigraphic, geothermal or disposal well that exceeds or that is expected to exceed 6,000 feet in true measured depth must file financial security for that well in an amount based upon the anticipated costs of plugging and abandoning that well to the satisfaction of the department in accordance with Part 555 of this Title[, up to \$250,000. However, the owner is not required to file financial security under this section exceeding \$2,000,000, regardless of the number of wells described in this section that the owner may have].

^{vi} **Subdivision (a) and (b) of Section 552.1 is revised and a new subdivision (c) is added to read:** This application shall not be required for deepening or plug back operations to be conducted exclusively within the producing horizon of a pool

^{vii} Subdivision (a) and (b) of **Section 552.1** is revised and a new subdivision (c) is added to read: This application shall not be required for deepening or plug back operations to be conducted exclusively within the producing horizon of a pool.

^{viii} **Section 552.1** (c) Any owner or operator who intends to re-fracture a well after initial completion or a subsequent re-fracturing operation shall apply for and obtain approval to re-fracture prior to commencing hydraulic re-fracturing operations. An application for approval to re-fracture a permitted well shall be made on the department's Sundry Well Notice and Report form or other form prescribed by the department and submitted at least 15 days before such refracturing operations are requested to begin.

^{ix} **Section 552.1** [(e)] (f) Under unusual or emergency circumstances, or for other good cause, the department may permit the commencement of operations by verbal authority of the director prior to the issuance of a formal permit.

^x **Section 553.1** is revised to read: (a) 'Statewide spacing' means spacing units for gas or oil wells that are within ten percent of the following sizes, as applicable, unless another percentage is specifically stated:

^{xi} **Section 553.4** is revised to read (b) Following the public comment period required by subdivision (a) of this section, the department shall determine whether substantive and significant issues have been raised. If the department receives no comments or if the comments do not raise a substantive and significant issue, the department shall issue the variance. If the department determines that substantive and significant issues have been raised in a timely manner, the department shall schedule a hearing to facilitate a decision on the variance application. -

^{xii} **Subdivision (c) of Section 554.1** is revised to read: [For purposes of this subdivision, drilling muds are not considered to be polluting fluids.]

^{xiii} **Section 555.5 (a) - (5)** The interval between all plugs mentioned in paragraphs (1) through (4) of this subdivision shall be filled with [a heavy mud-laden] gelled fluid with a minimum density equal to 8.65 pounds per gallon with a 10 minute gel-shear strength of 15.3 to 23.5 pounds per hundred square feet or other department approved fluid.

^{xiv} **Section 560.3 (d)** Water well testing: (1) prior to well spud, the operator must make all reasonable attempts to sample and test residential water wells within 1,000 feet of the well pad for the parameters specified by the department.

^{xv} **Section 560.3 (d) (1) (i)** A well control barrier policy shall be developed by the operator that identifies acceptable barriers to be used during identified operations. Such policy must employ, at a minimum, two mechanical barriers capable of being tested when conducting any drilling or completion operation below the surface casing. In no event shall a stripper rubber or a stripper head be considered an acceptable barrier