

Comments on the New York State Department of Environmental Conservation's

**SPDES General Permit for Stormwater Discharges From
High-Volume Hydraulic Fracturing**

**Submitted by the Independent Oil and Gas Association of New York
January 11, 2012**

The Independent Oil and Gas Association of New York (IOGA) respectfully submits the following comments on the New York State Department of Environmental Conservation's (DEC) draft State Pollution Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from High-Volume Hydraulic Fracturing (HVHF GP). The following comments are sequenced roughly in the order that related issues appear in the HVHF GP.

The DEC's proposed HVHF GP creates numerous requirements unique to the natural gas industry that are unnecessarily prescriptive and lacks the requisite flexibility to allow industry to create innovative solutions. Such a rigid approach may stifle, rather than foster, the development of new and more effective approaches to mitigation. This may even frustrate the implementation in New York of new technologies developed and approved for use in other states.

IOGA supports a HVHF GP that relies on a "performance-based" approach over a "prescriptive" one. An approach that employs threshold performance standards, rather than specific mitigation measures to achieve compliance, provides 1) flexibility to the regulated community, 2) incentive for the development of improved mitigation technologies and procedures, and 3) specific requirements which regulators can uniformly enforce.

More in-depth discussions of specific issues are provided in the following comments.

General Considerations

SPDES Multi-Sector General Permit

New York has a current SPDES Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activities (GP-0-06-002) that includes a provision in compliance with federal law for "stormwater discharges associated with industrial activity from oil and gas extraction" where if a discharge of a reportable quantity (RQ) of oil or a hazardous substance occurs operators must obtain a SPDES permit and develop a Stormwater Pollution Prevention Plan (SWPPP). High-Volume Hydraulic Fracturing (HVHF) operations are simply another type of oil and gas extraction activity that should otherwise qualify for regulation under the current Multi-Sector General Permit. The DEC should either modify the current Multi-Sector General Permit to cover HVHF operations or substantially revise the proposed HVHF GP to adopt a similar approach based on reportable quantity releases for HVHF operations.

National Pollution Discharge Elimination System Permit System Exemption

The Statutory National Pollution Discharge Elimination System (NPDES) permit exemption applicable to stormwater discharges associated with construction activities

remains in effect, even though a federal court overturned Environmental Protection Agency (EPA) regulations implementing it. The DEC should replace the provisions in the proposed HVHF GP regulating stormwater discharges from construction activities with a program similar to the robust yet streamlined Pennsylvania Erosion and Sediment Control General Permit (ESCGP-1). The ESCGP-1 requires operators to:

- Develop an E&S Plan that meets the standards and specifications such as those identified in the Pennsylvania Department of Environmental Protection's (DEP's) Erosion and Sediment Control Best Management Practices (BMP) Manual.
- Develop a Site Restoration Plan with post-construction BMPs.
- Satisfy the terms and conditions of the general permit and regulations.
- Meet guidelines such as those in the DEP's Oil and Gas Operators Manual and the Erosion and Sediment Pollution Control Program Manual.
- Apply BMPs consistent with the site characteristics and meet applicable performance and water resource protection requirements.

In addition, to qualify for an expedited permit, the application must be prepared and certified by a licensed professional (e.g., engineer, surveyor, geologist, or landscape architect) who is registered in the applicable state and who has demonstrated appropriate training on erosion and sediment control and post-construction stormwater management for oil and gas activities.

Site Mapping Requirements

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

Best Management Practices requirements

IOPA recommends that DEC revise their HVHF GP to mirror the flexibility in structural and non-structural BMP selection available in the Multi-Sector GP.

Specific Comments

Part VIII. A. 1. (27-28)

The requirement that operators shall develop and evaluate hydraulic fracturing fluid additive alternatives each and every time they conduct well stimulation is impractical given the slow rate of development of "green" additives. This requirement is unique to New York, and it assumes falsely that hydraulic fracturing (HF) fluid additives are constantly changing, equally effective, universally available, and not subject to trade secret protections. Furthermore, it does not recognize the need for field testing to ensure effectiveness of the alternative additives.

It is also important that the DEC recognize that the service companies providing HVHF stimulation chemicals and pumping services to operators are the entity most knowledgeable about the relative environmental benefits of both existing additive products and new additives. Consequently, IOPA strongly recommends that DEC focus the alternatives evaluation on the service providers rather than on the operators.

Furthermore, the review of additives for alternative “green” chemistry with every new permit application is impractical. When alternative additives with reduced toxicity are developed these additives become known throughout the industry and also by regulators. Since the introduction of new hydraulic fracturing products is a time-intensive process for service and chemical companies and because operations tend to use a similar set of products when conditions allow within a play, IOGA recommends that a biennial master chemical review by the HVHF service companies be instituted rather than a permit-specific review. This chemical review would focus on the relative toxicity and other environmental attributes of the various additives that are used, or could be used, by a service company in hydraulically fracturing Marcellus Shale wells or wells in other shale gas plays. The service company would include in the review any “green” products it offers that could be used in shale gas wells. The service company could subsequently update its master list when it anticipates using a new chemical, or every two years at a minimum. Each application for permit to drill submitted by an operator would include a permit condition that the operator must use a service company that has an approved filing on record with the DEC. The service company in turn would have already addressed the relative environmental attributes of its additive products under its master (biennial) filing to the DEC.

Such an approach has several benefits. It places the product review responsibility in the hands of the service companies who provide the fracturing fluids. The service companies will be the first to know of new chemical availability and, therefore, are best positioned to notify DEC regarding such products. It will also serve to significantly reduce the review burden on DEC, there will be only a handful of master review lists requiring approval (i.e., a list for each service company), rather than adding to the review and approval process for each permit application.

DEC must also consider that “green” additives may not always be the most suitable for a particular fracture treatment based on local geology or other conditions. The universal use of green chemicals which are efficacious but less efficient could result in reduced well efficiency and less efficient production of the resource. The approach currently contemplated by DEC appears not to acknowledge the significant steps that have been taken to improve HVHF chemistry to date (including a trend towards the overall reduction in the number of chemical additives used in a fracture fluid blend), particularly as relates to its use in the Marcellus Shale area.

Part X, Specific BMP Requirements

The BMP provisions in Part X are far too numerous and unnecessarily prescriptive. For example, there are fourteen sections (A-N), 50 subsections, and over 150 individual provisions. The DEC should replace these provisions with flexible narrative standards for BMP selection. Such an approach could be modeled after Pennsylvania’s NPDES General Permit for Discharges of Stormwater Associated with Industrial Activities (PAG-03).

As examples of unnecessarily prescriptive provisions, consider “a-c” under Good Housekeeping Procedures in the Lumber Storage or Processing Areas section K, which states, “Prevent the discharge of wood debris; Minimize the leachate generated from decaying wood material; and Minimize the generation of dust.” This provision is required of all operators without regard to its applicability to the oil and gas operations being regulated by SPDES that do not include the storage or processing of lumber.

Part X, Benchmark Monitoring

The benchmarking requirements in Part X are excessive, given the purpose of stormwater outfall monitoring as stipulated in section 3.e. These testing requirements go well beyond what is required of any other industry in New York State and will send a signal to the oil and gas industry that New York State is not open for business. Furthermore, these requirements will be costly, particularly when considered over the entire productive life of a well or multi-well pad (decades), because chemical use/storage at the well pads will be limited or non-existent for most of those producing years. Specific examples of particularly excessive sampling and analyses are the current requirements for gas chromatography/mass spectrometry (GC/MS) Hazardous Substance Library Search and radiologic species

The DEC should replace all of the proposed benchmark monitoring requirements with the current total suspended solids (TSS), chlorides and pH requirements in the current Multi-Sector GP coupled with targeted supplemental sampling and analysis, as needed.

Generally, it appears, based on the requirements of the Multi-Sector GP, that HVHF is being singled out for excessive regulation in comparison to other industries in New York. No other industries are held to a similar level of testing requirements (e.g., including tentatively identified compounds [TICs]) for their stormwater discharges in New York.

IOGA recommends the implementation of Annual Inspections, as is allowed by Pennsylvania's NPDES General Permit for Discharges of Stormwater Associated with Industrial Activities (PAG-03), in lieu of the onerous, unnecessary and excessive Benchmark Monitoring currently proposed in the HVHF GP.