

6 NYCRR Parts 52, 190, 550-556, 560, and 750
HIGH-VOLUME HYDRAULIC FRACTURING

REVISED REGULATORY IMPACT STATEMENT SUMMARY

The proposed revised rulemaking modifies Department of Environmental Conservation's (Department) regulations for oil and gas, the State Pollutant Discharge Elimination System (SPDES), fish and wildlife, and state lands and promulgates new regulations related to high-volume hydraulic fracturing (HVHF).

Statutory Authority and Legislative Objectives. The Department proposes these regulations to ensure potential environmental impacts resulting from HVHF are mitigated to the maximum extent practicable consistent with the legislative objectives in the Environmental Conservation Law (ECL). The Department's general authority for the proposed revised rules is found at ECL Articles 1 and 3, which identifies the state's responsibility to manage water, land, fish, wildlife and air resources to assure their protection, enhancement, and balanced utilization, without risk to health and safety.

ECL sections 23-0301, 23-0303, 23-0305, 23-0501 and 23-0503 provide specific authority for the proposed changes to Parts 550 through Part 556, and Part 560. These provisions provide the Department with power to regulate drilling, casing, operation, plugging, replugging, and posting of financial security for wells, and reclamation.

Changes to the Department's existing rules include clarifying language to Section 552.2 to specify that expiration of a permit to drill does not relieve an operator from compliance with the permit terms once operations have commenced; removal of the \$2 Million cap on financial security; updates to statewide spacing regulations; and enhancements to the requirements for plugging and abandonment of wells.

Part 560, applicable to HVHF wells, promulgates many mitigation measures specified in the Supplement Generic Environmental Impact Statement on the Oil and Gas Regulatory Program (SGEIS). The proposed

revised rule includes requirements for: blowout preventer use and testing plan; detailed mapping; enhanced disclosure of chemical additives; and well pad siting setbacks. The chemical disclosure must identify each chemical constituent intentionally added to the base fluid and its proposed concentration. The revisions also establish a process for review of permit applications, including a 15 day public comment period, and provisions for collection of fees. The proposed revised rules also contain detailed well construction, site preparation, operational, and maintenance requirements.

These proposed revised regulations further the state's legislative goals by ensuring that wells are properly constructed and operated, while facilitating the state's goal to provide for the efficient development, production and utilization of natural resources of oil and gas in such a manner as to prevent injury to the operator, mineral rights' owners and the state as a whole.

With respect to the proposed rules related to SPDES, the ECL provides broad authority for the protection of the waters of the State. Statutory authority is provided in ECL Sections 15-0103, 15-0105, 17-0101, 17-0303, 17-0501 and 17-0511, 17-0807, 17-1709, and 71-1929. Specific authority for the proposed regulations is found at ECL Sections 17-0101 and 17-0303, which declare it to be the public policy of the State to maintain reasonable standards of water purity and authorizes the Department to prevent the pollution of the waters of the State in accordance with water quality standards. Furthermore, ECL Section 17-0501 makes it unlawful to discharge to any water of the State in violation of a water quality standard.

This proposed rulemaking updates Section 750-1.5 and add a new Part 750-3. The update to Section 750-1.5 conforms the regulation to the current federal process for issuance of Underground Injection Control permits. Part 750-3 will prohibit certain HVHF activities and discharges and prevent the issuance of a SPDES permit for such activities or discharges within specified distances from water resources. Specific changes have been made in the proposed revised rules with respect to the prohibitions from intakes in flowing water intakes and private water wells. Furthermore, Part 750-3 details the conditions that must be satisfied for the exemption

for the requirement to obtain a SPDES permit for the injection of water, gas or other material through into a well, except a disposal well, which facilitates the production of gas resources.

The proposed revised changes to Part 750-3 also specify the conditions under which an applicant may receive a SPDES permit and a list of requirements applicable to HVHF operations. The proposed revised rule also includes: a list of certifications required by the applicant; the need to develop a comprehensive stormwater pollution prevention plan (SWPPP); the need to submit documentation of the anticipated depth of the top of the objective formation, and the depth of the base of the known freshwater supply, along the proposed revised length of the wellbore; best management practices for construction, reclamation and drilling related to HVHF operations; requirements that all HVHF wastewater will be treated, recycled or otherwise disposed of; monitoring, reporting and recording requirements; testing requirements for residential water wells; and a groundwater monitoring program. The proposed revised rules also contain requirements regarding coverage under a new HVHF General Permit.

Statutory authority for the proposed revised rules concerning state-owned lands is found in New York State Constitution, Article XIV, and at ECL Sections 9-0105, 9-0301, 9-0501, 9-0507, 11-2101, 11-2103, and 45-0117. The Department has the responsibility to exercise care, custody and control of state-owned lands and to make rules and regulations governing their use. The ECL also provides the Department with the authority to receive and accept land for conservation, watershed protection, forest management and to conserve rare plants and ecological communities on state-owned lands and lands under the jurisdiction of the Department. The proposed revised regulation fulfills the legislative objectives by ensuring that the production of natural gas using HVHF does not interfere with the purpose for which state-owned land was acquired.

Needs and Benefits. The proposed revised revisions to Parts 550 through 556 will update and improve regulatory conditions in the state by ensuring that well operators obtain adequate financial security to cover the cost of plugging deep wells, providing the regulated community with sufficient time to commence operations,

and specifying requirements for properly plugging and abandoning a well. The new Parts 560 and 750-3 will ensure the minimization of the potential environmental impacts to New York's water resources, ecosystems, and air quality, as well as the impacts of HVHF on communities where these wells are expected to be drilled. These regulatory revisions will inform and serve the public and regulated community, supplement the Department's ability to monitor and enforce certain measures identified in the SGEIS, and will update some of the Department's regulations to reflect technological advances and current industry practice.

The regulations, by providing for a balanced use of both the surface environment and the natural gas in the subsurface, promote a greater level of environmental protection than would be the case without the regulations. Greater environmental protection includes minimizing the probability and risk to uncontaminated aquifers and drinking water wells, streams and surface waters, and maintaining the passive use of natural resources, amongst others. Additionally, as identified in the SGEIS, by approving the utilization of HVHF it is expected that there will be extensive job creation.

Costs to Industry. The costs to the regulated community for the proposed revised regulations will generally not differ from the potential costs that should be expected from the mitigation measures and permit conditions identified in the SGEIS. Cost projections from the Independent Oil and Gas Association of New York (IOGA) for complying with the 2011 revised SGEIS range from \$400,000 to \$1,700,000 for the first well drilled on a well pad. The Department conducted a limited cost assessment, and found that, with respect to at least two categories of cost estimates, IOGA's estimates were excessive. The Department requested industry to provide additional cost information, but the Department has not received any additional information. The use of the general permit for stormwater management will reduce regulatory fees and other burdens below what would be required if individual permits were issued. The prohibition of surface activities associated with HVHF on state-owned lands might render some gas resources unavailable, which could result in potential lost opportunity for industry and leaseholders. In addition, costs to such leaseholders could increase if they choose to acquire

surface access outside state-owned lands.

State Costs. These regulations will create additional costs for several state agencies, including the Departments of Environmental Conservation (Department), Health (DOH), Transportation (DOT), Public Service and Agriculture and Markets. DOH would incur costs investigating complaints related to public health concerns; DOT would be expected to review transportation plans that drillers submit with well applications; Public Service staff would be involved in the siting and construction of natural gas transmission pipelines; and, Agriculture and Markets would incur additional costs in its Agricultural District Program.

The actual costs that may be incurred by the Department and other state agencies cannot be currently estimated, given a lack of necessary information. However, 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.

Local Government Mandates. While the proposed revised regulations do not mandate the expenditure of funds by any sector of local government, local governments will likely incur some indirect effects as a result of the Department's approval to utilize HVHF. The rules would require well operators to test private residential water wells within 1,000 feet of a well pad's location, or 2,000 feet in some circumstances. County health departments may need to respond to issues with these residential water wells that may arise as a result of testing. Those costs will be compliance driven and cannot be quantified at this time.

These regulations would allow operators, under certain requirements, to dispose of flowback water and production brine through publically owned treatment works (POTWs). To accept this water, POTWs must perform a headworks analysis to ensure they can properly remove contaminants expected to be present in flowback water and production brine prior to discharge.

In addition, heavy truck traffic will result in local costs for road maintenance, though the proposed revised rules contain requirements to assist in mitigating those impacts. It is projected that HVHF 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. These revenues are expected to offset local government costs that may result from HVHF activities.

Paperwork. The proposed revised rules include new paperwork requirements for all well operators, including: the need to notify and receive approval to re-fracture a well; a requirement to submit an interim Well Drilling and Completion Report; and new paperwork requirements specific to HVHF. The draft regulations also require submissions to the Department pursuant to the stormwater general permit. Since the majority of HVHF activities would be under a general permit using standardized forms, less paperwork will be generated than required by an individual permit.

Duplication. This proposal is not intended to duplicate any other federal or State regulations or statutes, as there is no federal regulatory program covering HVHF.

Alternatives. The Department examined the “no-action” alternative, in which mitigation measures and other requirements resulting from the environmental review process would alone direct these operations. However, the no-action alternative could create uncertainty for the regulated community and the public because controls over HVHF activities would not be promulgated. The Department considered the denial of permits for HVHF, but while this alternative would fully protect the environment from any environmental impacts associated with HVHF, it would eliminate the economic benefits.

Federal Standards. There is no federal regulatory framework over HVHF, although in April 2012, EPA finalized air emission standards for the entire oil and gas industry. There are no applicable Federal standards for groundwater protection. Thus, the proposed revised rules exceed minimum federal government standards. There are applicable Federal standards for stormwater and New York meets or exceeds all federal requirements.

Compliance Schedule. The regulated community will be required to comply upon enactment of the rules.