

Monticello, NY - Congressman Maurice Hinchey (D-NY) today submitted comments to the New York State Department of Environmental Conservation (NYSDEC) regarding the draft scope for the Draft Supplemental Generic Environmental Impact Statement (dSGEIS) on the Oil, Gas and Solution Mining Regulatory Program. NYSDEC has solicited comments on its draft scope for the environmental review of natural gas drilling in the Marcellus Shale deposit.

Hinchey asked the agency to use the SGEIS process to "develop and implement the highest standards possible for protecting human health and the environment" for permitting and regulating new gas drilling operations. In addition, Hinchey called for an analysis of the cumulative impacts from the expected proliferation of drilling, full review and public disclosure of hydraulic fracturing chemicals, and requirement of best management practices by gas companies to ensure the protection groundwater, aquifers and surface waters.

The full text of the comments follows:

I thank the NYSDEC for considering these comments regarding well permit issuance for horizontal drilling and high-volume fracturing to develop shale and other low-permeability gas reservoirs. The rapidly growing interest in developing and utilizing the potential natural gas resources in the Marcellus Shale deposit can offer New York State important economic opportunities and provide cleaner burning fuel sources to meet the State's energy needs. However, it is imperative for the NYSDEC to exhaustively scrutinize Marcellus natural gas drilling through the updating of the Generic Environmental Impact Statement under the State Environmental Quality Review Act (SEQRA) to ensure that these activities do not adversely impact public health or the environment.

NYSDEC has identified many key issues in the Draft Scope that require investigation and analysis. These concerns include water withdrawals and transportation to well sites, the use and disposal of potentially hazardous chemical additives in fracturing water, and environmental and community impacts from drilling activities. As some of the environmental organizations in our region have noted, the Draft Scope does not specifically identify the methodologies for assessing these critical issues. NYSDEC should revise the scope to include specific discussion of how the agency will consider and deal with such issues.

As NYSDEC wisely stated in its Original Finding Statement of September 1992, "It is less

expensive to prevent pollution than pay for remediation of environmental problems, health care costs, and lawsuit expenses." In developing the natural gas resources available throughout the Marcellus Shale deposit in a manner consistent with that statement, NYSDEC should develop and implement the highest standards possible for protecting human health and the environment. I remain especially concerned about the potential adverse impacts to our state's invaluable water resources from the process of "slick water" or hydraulic fracturing, and I firmly believe that we cannot allow drilling activities to risk contamination of New York's groundwater, aquifers, or surface waters. Complete SGEIS and ensure oversight capacity before issuing new permits. In light of the potential adverse impacts from the use of hydraulic fracturing technologies, NYSDEC should delay issuing any new gas drilling permits in the Marcellus Shale deposit until after the completion of the SGEIS. Since many of the potential new drilling sites fall within environmentally-sensitive areas such as the Susquehanna River Basin, Delaware River Basin, Catskill Park, and New York City Watershed, developing consistent criteria for environmental review and implementing protective procedures and standards for all new gas drilling permits is vital before additional drilling permits are issued. It is entirely prudent to delay any new permits in the Marcellus Shale deposit until NYSDEC has had sufficient opportunity to review and mitigate possible impacts, particularly in consideration of the potentially massive scale of drilling activities over the next years and decades.

In addition to completing the SGEIS, it is also critical that NYSDEC have in place the personnel and technical resources necessary to properly evaluate and oversee increased drilling activities. As part of the SGEIS, NYSDEC should consider an updated drilling fee structure and other options that would provide the agency the financial capacity to fully monitor and oversee thousands of possible new gas wells throughout the State. NYSDEC should undertake a full assessment of its current capacity under the state's current fiscal constraints to permit and oversee drilling under a full build-out scenario.

Consider cumulative impacts from Marcellus Shale drilling

NYSDEC has rightly identified the need to assess the potential rate of natural gas development and how that pace of development might impact local communities and the environment. Additionally, it is important to critically assess the cumulative impacts of the rapid proliferation of new gas well sites. The SGEIS should analyze the feasibility of phasing-in drilling activities over a period of time and/or limiting the total number of wells within specific areas of concern beyond the regulatory density restrictions. This should include analysis of whether drilling should be precluded from particularly sensitive areas, such as the New York City Watershed. The SGEIS should assess the total impact of thousands of new well sites, services roads, and pipelines as well as the cumulative effects of using hundreds of millions of gallons of water for fracturing operations at thousands of new possible wells. The SGEIS should also consider the impacts from repeated or multiple fracturing at existing wells over the life of operations at those sites.

In addition to assessing whether and how drilling should take place in certain areas, the SGEIS should examine how thousands of new gas wells throughout New York State might impact water quality, scenic and historic resources, and land use patterns. When new subdivisions or commercial developments are reviewed under SEQRA, lead agencies must take into account the aggregate impacts of development and avoid segmentation in reviewing a project. The industrial activity of gas drilling in the Marcellus Shale should be considered in the same cumulative and comprehensive manner as part of the SGEIS.

Provide Notification and Opportunity for Comment to Municipalities

Under current standards, gas and oil companies must notify local governments at least five days prior to commencing drilling. This standard should be increased to at least fourteen days or more to allow local governments time and opportunity to respond. In addition, local governments should be notified upon the submission of any permit within their respective jurisdictions and should be allowed to submit comments in the event that site or other conditions exist that should be considered by the NYSDEC in the context of the permitting process. NYSDEC should assess the feasibility of coordinating with local and county governments to ensure that gas drilling operators have in place reasonable agreements for road impact costs with these local governments before drilling permits are issued.

While the dSGEIS notes that NYSDEC will post all applications on line, it is important that NYSDEC ensure local municipalities receive notice of pending permit applications and have appropriate opportunities to comment on such activities. For instance, if a gas company has previously disregarded its obligations and commitments to the host municipality or nearby landowners, the municipality should have every opportunity to include such considerations in the permitting process. NYSDEC should also consider instituting a notification system to inform adjacent and nearby landowners who are not directly working with gas companies.

Develop and Require Best Management Practices

While there is disagreement in many of our communities as to whether natural gas drilling should be allowed to proceed, there is unanimity from citizens that have contacted me that any new drilling in the Marcellus Shale must be done in the most protective manner possible in order to protect both landowners and host communities. Towards this end, the SGEIS should

analyze and propose a range of Best Management Practices for the exploration and drilling of natural gas wells throughout the Marcellus Shale deposit.

Companies that apply for permits in areas appropriate for gas drilling should be required to use best management practices established by NYSDEC in order to take advantage of a shorter EAF process rather than a longer, more detailed process. NYSDEC should consider specific requirements, including the following:

- * Use of "green" fracturing fluids. NYSDEC should assess a requirement for use of alternative, non-toxic fracturing fluids, such as those used in offshore locations and other environmentally sensitive locations. Sante Fe County in New Mexico recently proposed a similar requirement that would force companies to use fresh water for fracturing or choose from a county-approved list of non-toxic chemical alternatives.

- * Implementation of stormwater best management practices to minimize erosion, turbidity and sedimentation problems. Such practices might include increasing buffers between well sites and surface waters and preventing drilling activities in sensitive areas prone to erosion.* Utilization of closed-loop drilling system. A closed system would be designed to keep all additives, fracturing fluids and water within containment tanks, storage trucks or flow lines. This requirement could help to avoid the potential for site run-off of contaminated water and possible evaporation and volatilization of harmful substances in processed water.

- * Use of "recycled" wastewater for fracturing. NYSDEC could require fracturing water to be sourced from wastewater treatment plants within close proximity to well sites, which would dramatically reduce the need for water withdrawals from area surface waters. NYSDEC should further ensure that any wastewater used is fully treated and meets water quality standards, which in some cases is a concern due to the age and inefficiency of some of our region's wastewater plants.

- * Treatment of fracturing water on-site. The use of mobile treatment technologies could minimize the need for water withdrawals for fracturing and also mitigate the looming problem and impacts of transporting by truck millions of gallons of water to appropriate treatment facilities. A number of companies offer such treatment services, including Ecosphere Technologies Inc. and STW Resources, Inc. NYSDEC should ban the disposal of fracturing water through injection wells, road spreading and municipal treatment plants that were not designed to deal with salts and industrial chemicals.

* Maintenance of inventories of chemicals at specific sites. Such requirements would help to ensure better tracking of potentially hazardous materials and allow safer and easier response to spills or other emergency situations.

* Creation of testing and monitoring protocols. The SGEIS should include a regimen for testing nearby wells and water resources prior to drilling to establish a baseline for chemicals that might be used in gas drilling. NYSDEC should require independent testing and monitoring of fracturing fluids and nearby wells for all gas drilling sites.

Assess potential impacts of hydraulic fracturing and chemical additives

While NYSDEC indicates that the hydraulic fracturing has been used in the state for many years, the possibility of contamination of ground and surface waters from hydraulic fracturing fluids remains a serious concern. In the Draft Scope, NYSDEC notes, "Well stimulation, including hydraulic fracturing, was expressly identified and discussed in the GEIS as part of the action of drilling a well, and the GEIS does not recommend any additional regulatory controls or find a significant environmental impact associated with this technology, which has been in use in New York for at least 50 years." The dSGEIS does propose to revisit this issue due primarily to the massive volumes of water involved and potentially sensitive locations for drilling. However, NYSDEC should also review and examine the technology of hydraulic fracturing, itself, which has evolved in recent years and has become increasingly reliant on chemical additives and propellants to maximize natural gas recovery.

When DEC assessed gas drilling in the original GEIS, most of the solutions used in well fracturing consisted of brine water mixed with sand. NYSDEC previously allowed these fluids to be spread on roads as a means of disposal and as a way of reducing costs to highway departments for controlling dust in the summer and salting roads in winter. Gas companies have increasingly moved towards the use a wide range of industrial and toxic chemicals that clearly should be dealt with in a different manner and treated as hazardous waste.

On October 25, 2007, Theo Colborn, PhD, testified before the House Committee on Oversight and Government Reform regarding gas and oil development, indicating that she has identified nearly 300 different chemicals used in modern hydraulic fracturing, many of which are associated with human health impacts. NYSDEC has indicated it will review additional

information on chemical propping agents from the service companies and chemical suppliers. In addition, NYSDEC should conduct a thorough review of independent research on fracturing chemicals, many of which are considered toxic and carcinogenic. As the Draft Scope correctly notes, "Because of groundwater's relatively slow flow rates, contaminants introduced into an aquifer usually cannot be removed except over long periods of time." With that in mind, we need to be absolutely sure that any chemicals used do not compromise the integrity of our region's water supplies.

The Draft Scope indicates that NYSDEC is not aware of a single case of groundwater contamination in the State from hydraulic fracturing. However, more than one thousand incidents of contamination from hydraulic fracturing operations have been reported to courts and state and local governments in a number of states including Colorado, New Mexico, Alabama, Ohio, and Pennsylvania. The U.S. Bureau of Land Management recently documented contamination of groundwater from hydraulic fracturing in Sublette County, Wyoming, where the agency found benzene levels at more than 1500 times the "safe" level for humans, which is the first such case of contamination documented by a federal agency. The SGEIS should consider the growing number of reported incidents in order to better understand how to prevent and avoid such incidents in New York State. NYSDEC should disclose the proposed composition of fracturing fluids while also working to prevent the use of any chemicals that threaten human health or the environment. The public has every right to know what chemicals may be used in hydraulic fracturing and what their associated risks are.

NYSDEC should carefully examine the technology of hydraulic fracturing, particularly in light of the lack of proper review by the federal government. The EPA concluded in a 2004 report that hydraulic fracturing posed "no threat" to drinking water supplies and no further study was needed. NYSDEC should not rely on such assurances since the studies conducted by EPA were both limited and questionable in terms of their findings.

The EPA's studies were narrowly focused on coalbed methane wells and were apparently developed in consultation with gas companies. The report overlooked many of the contamination issues that were coming to light, particularly in a number of western states. Weston Wilson, an environmental engineer who worked with EPA in the Denver area since 1974, has also challenged the EPA report. Mr. Wilson notified Congress of his concerns with the report under the Whistleblower Protection Act. In an October 8, 2004 letter, Wilson noted that EPA's report was "scientifically unsound" and was peer reviewed by individuals with direct conflicts of interest. Three of these individuals worked for the gas and oil industry while two others were former employees of the industry. Unfortunately, this inadequate report was used to justify the inclusion of provisions in the Energy Act of 2005 (EPA Act) that exempted this technology from the Safe Drinking Water Act (SDWA.) I opposed and voted against this legislation and have recently sponsored legislation to overturn this exemption, which I expect to

pass in the upcoming Congress.

It is clear that the manipulation of agency reports and scientific data under the administration of George W. Bush has made many of EPA's positions and regulations during the past eight years suspect and subject to reevaluation. This extends from earlier actions such as the development of the hydraulic fracturing report to one of the agency's most recent actions allowing the dumping of debris from mountaintop removal coal mining into nearby streams in direct contradiction to the Clean Water Act. The EPA's false claims that hydraulic fracturing poses no risks to groundwater are belied by the growing number of reports from around our nation, and this issue must be carefully reexamined considering the dubious and suspect context in which those findings were reported.

In conclusion, the development of the SGEIS presents NYSDEC with a critical opportunity to consider and mitigate many of the concerns associated with the proposed drilling. I appreciate the strong commitment to date by the State of New York and NYSDEC to ensuring that Marcellus Shale gas drilling is thoughtfully considered and reviewed. Thank you in advance for your consideration of my comments and those submitted through the public comment process.