



Enforcement Report
NYS DEC

NEW YORK STATE DEPARTMENT
OF ENVIRONMENTAL
CONSERVATION

**Inadequate enforcement
guarantees irresponsible oil and
gas development in New York**

JULY 2012



Failure to adequately enforce
oil and gas rules will harm New
York's public health, safety, and
environment



EARTHWORKSTM

OIL & GAS ACCOUNTABILITY PROJECT

New York's Oil & Gas Enforcement

NEW YORK IS DECIDING WHETHER TO JUMP INTO THE SHALE GAS RUSH—BUT ISN'T READY TO OVERSEE IT.

The Division of Mineral Resources (DMR) within New York's Department of Environmental Conservation (DEC) administers regulations and a permitting program for oil and gas drilling and well operations. The Division's mandate involves "fostering, encouragement and promotion of the development, production and utilization of... oil and gas," as well as responsibility for enforcement of oil and gas regulations and "the prevention of pollution."¹ Other divisions within DEC also participate in various aspects of oil and gas permitting and inspections.²

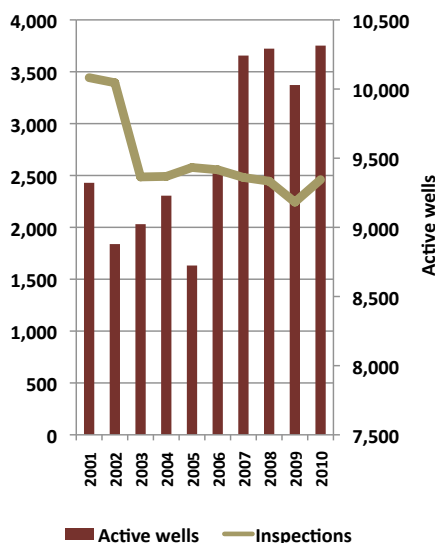
New York has been an oil and gas producing state since the 1800s.³ Compared to other states, however, New York has a relatively small industry, and has not yet experienced the boom in shale gas drilling underway in Pennsylvania and other parts of the country.

Currently, permitting of shale wells using horizontal drilling and high-volume hydraulic fracturing (HVHF) is on hold until DEC completes the environmental review required by state law, including the issuance of a Final Supplemental Generic Environmental Impact Statement (SGEIS).

If the hold is lifted, the SGEIS will go into effect, and the state will begin to issue drilling permits. Industry projections suggest DEC will receive applications to drill approximately 1,600 Marcellus Shale wells in an average year over 30 years.⁴

A review of publicly available DEC enforcement data shows that New York struggles to adequately govern its existing oil and gas wells, and DEC is not prepared to oversee the expected shale gas boom:

- Inspections occur too infrequently and too irregularly
- Fines are inadequate
- Lack of data prevents public evaluation of DEC's oversight
- Citizen complaints are not efficiently used to improve oversight



Inspections vs. Active Wells in New York State

The number of oil and gas inspections decreased by more than 1,000 per year between 2001 and 2010, yet the number of active wells⁹ increased by approximately 1,000 over the same time period.⁹

In 2002, DMR inspectors were conducting one inspection per 2.6 active wells. By 2010, they were only able to conduct one inspection per every 4 active wells.

Enforcement Data – INACCESSIBLE

We tried to speak with a representative of the New York DMR Bureau of Oil and Gas Permitting and Management about obtaining statistics on inspections, violations, and complaints relating to existing wells and facilities. However, our calls were not returned. Eventually, in response to an email request for information on these topics, Earthworks received this reply:

The Division of Mineral Resources does not currently have a database for the information requested...We are preparing to have one in operation at the time high-volume hydraulic fracturing activities are approved to go forward in the state. We do have paper records located in the field offices where the proposed wells were drilled. The record [sic] are filed by county, operator and by well name. You can review the paper records at our ... offices.⁵



New York failed to inspect three out of every four active wells in 2010.

Inspection Capacity – INADEQUATE

As seen in this chart below, oil and gas inspections have decreased over the past decade. It's not clear why inspections have declined. It's possible that the number of inspectors decreased over that period. Non-DEC sources indicate that the number of inspectors declined from 17 in 2009 to 14 in 2011, but statistics for years prior to 2009 were not found.⁶

As in other states reviewed by Earthworks,⁷ inspections have not kept pace with the growth of oil and gas development in New York.

The table on page 3 shows that **at least** 7,854 or 75 percent of active oil and gas wells in New York were not inspected in 2010.¹⁰ Compared with other states that we reviewed, only Pennsylvania and Ohio inspectors failed to inspect a higher percentage of active wells in 2010.¹¹

How frequently are wells inspected? How frequently should they be inspected?

According to the DMR's 2009 Oil, Gas and Mineral Resources Annual Report,¹² oil and gas staff inspect well sites:

- During permit application review to check environmental and public safety issues
- During drilling to check on well site construction and drilling permit compliance
- During the operating phase to check for leaks, spills, or other potential problems
- To ensure that well plugging and site reclamation meet requirements
- Upon receipt of a well transfer request
- When staff perform follow-up inspections to ensure any violations are properly remediated

The annual report does not elaborate on how often inspectors are present during drilling activities (drilling and well completion can last for weeks), and how frequently wells are inspected during their operating phase (wells can operate for decades).

Currently there are no accepted best practices for inspections. However, some states have developed guidelines for how frequently oil and gas wells should be inspected. Relative to Pennsylvania and North Dakota, however, New York's suggested inspection frequencies are low (see Earthworks' web site for comparison table).¹³

DEC has proposed that if high-volume hydraulic fracturing is used to drill wells in New York State, drilling permits will only be issued to the extent that the department has the resources to review and oversee activities,¹⁴ and "adequately inspect well pads and enforce permit conditions and regulations."¹⁵ But DEC has not provided an explanation of what it means to adequately inspect well pads and enforce permit conditions and regulations. It is also not clear whether DEC will establish an "adequate" inspection program prior to permitting HVHF wells in New York.

If allowed to proceed, the majority of future oil and gas development in New York is going to be from more technically challenging unconventional oil and gas wells, which require larger volumes of water and chemicals and produce more waste than conventional wells. Under these circumstances, simply maintaining the status quo for inspections and enforcement will be entirely inadequate.

More than 75% of active oil and gas wells in New York were NOT inspected in 2010.

	Number of inspections	Number of wells inspected	Number of active wells	Approx. # of active wells NOT inspected	Active wells NOT inspected
Colorado	16,228	16,228 (estimate)	43,354	27,126	63%
New Mexico	20,780	20,780 (est.)	53,053	32,273	61%
New York	2,460	2,460 (est.)	10,314	7,854	76%
Ohio	10,472	5,644 (actual)	64,378	58,734	91%
Pennsylvania	15,368	8,565 (actual)	91,167	82,602	91%
Texas	121,1231	121,123 (est.)	282,896	161,773	57%



DEC has set a low bar for inspections. Other states suggest that inspections be carried out much more frequently than what occurs in New York.

found regarding what types of violations resulted in enforcement actions and penalties.

The maximum penalty for an oil and gas rule violation in New York is low – rules limit it to \$8,000 plus an additional \$2,000 per day that the violation continues.¹⁸ In contrast, the Pennsylvania's Department of Environmental Protection has the ability to issue penalties of up to \$25,000 plus \$1,000 per day of continuing violation for conventional oil and gas wells, and \$75,000 plus \$5,000 a day for unconventional wells.¹⁹ In Texas, the Railroad Commission can fine oil and gas operators up to \$10,000/day if they break rules pertaining to safety or pollution prevention.²⁰

Generally, the purpose of penalties is twofold: to deter violators, and in some cases to provide compensation for harm, such as pollution. New York's current average \$2,000 fine per violation – when levied – is likely insufficient to achieve these purposes.

It's difficult to do an in-depth analysis of DEC's oil and gas enforcement program because DEC does such a poor job of posting information on oil and gas enforcement actions. In most years there has been no information on the number

of administrative enforcement actions that led to penalties (or number of actions taken by the Attorney General).²¹

The tracking of violations and enforcement actions is not only of interest to the public, it is also an important tool to enhance DEC's understanding of where to focus its enforcement efforts, and to ensure that regulators and policymakers have the information necessary to make sound decisions on how best to protect public health and the environment.

Violations – NO DATA

Unlike other state oil and gas agencies, New York's DEC does not yet keep oil and gas violations in a publicly accessible electronic database, nor does it publish statistics on violations in the DMR annual report or on its web site.¹⁶

Enforcement Actions – LOW FINES, DATA LACKING

The DMR's annual reports up through 2009 contain some information about penalties and other enforcement actions taken against oil and gas operators. Annual reports for 2010 and 2011 have not yet been published by DMR.

Civil penalties for violations of DEC's oil and gas regulations are rarely issued, and do not amount to much. Data are limited, but show that in 2006 only 12 enforcement cases resulted in penalties, and in 2007 the number dropped to 10 penalties. As a result of the paucity of penalties, DEC collected a pittance: since 2005, the total amount of administrative penalties collected by DEC has not exceeded \$40,000 in any one year. Most years, that total was less than \$20,000. (See Earthworks' web site for New York penalty data).¹⁷ So, on average, less than \$2,000 was collected per enforcement case. No details were

Public Participation Actions – CITIZEN COMPLAINTS NEED MORE ATTENTION

According to the DMR Bureau of Oil and Gas Permitting and Management web site, the Bureau investigates and resolves citizen complaints and non-routine incidents.²² Currently, the Bureau does not track these complaints in a manner that is accessible to the public.²³

Citizen complaints can be an important barometer of industry behavior, and citizens can provide a crucial early warning of problems at oil and gas sites. In Texas, the oil and gas regulatory agency has stated that, "Citizens are viewed as extra eyes to help the RRC [Railroad Commission] identify problems."²⁴ In Pennsylvania, complaints led to the discovery of at least 700 violations between 2007 and 2011.²⁵

In New York, the investigation of water well complaints in relation to oil and gas development is not always handled by DEC.²⁶ Based on information in the SGEIS, it is not clear if the DEC will only respond to water complaints that occur during oil and gas drilling, or whether DEC will also investigate water complaints if they occur close to established oil and gas wells or other oil and gas facilities (such as chemical storage areas). All citizen complaints related to water contamination, especially those involving methane, hydrocarbons, or chemicals in water, should be followed up by DEC regardless of the stage of oil and gas development.

The Path Forward

No matter how strong the statutory or regulatory standards for oil and gas development, inadequate enforcement of those standards guarantees irresponsible development. To make oil and gas enforcement in New York more than an afterthought, DEC needs new enforcement rules and practices. **They should include:**

INSPECTIONS

- Develop comprehensive and binding inspection protocols – i.e., determine what it means to “adequately” inspect well sites. HVHF drilling should not proceed until such a protocol is developed.
- Establish minimum inspector-to-well and annual-inspections-to-well ratios. New wells must not be allowed until the state can meet these minimums.

- Competitively pay inspectors to retain high quality personnel and ensure competent inspections.

ENFORCEMENT ACTIONS

- Establish binding criteria for taking enforcement actions and levying penalties that ensure that violations receive consistent treatment.
- Increase fines and enforcement actions, especially against the worst operators (such as repeat offenders and those with the most fines) to encourage better practices and deter potential violators.

PUBLIC PARTICIPATION

- DEC can strengthen relationships with citizens by responding to and resolving all citizen complaints in a timely and thorough manner.
- Collect and track comprehensive data regarding citizen complaints – including facilities of concern, nature of complaint, DEC follow-up, and resolution.
- Increase transparency by publishing comprehensive oil and gas enforcement data (on inspections, violations, enforcement actions taken, and penalties levied/collected) on-line, in a publicly accessible, searchable format. Make data available on a well-by-well basis and by bulk download.
- Periodically analyze and publicly report trends in enforcement.

For a more detailed analysis of oil and gas enforcement in New York State, visit Earthworks' New York Enforcement web page: <http://enforcement-ny.earthworksaction.org>

ENDNOTES

- 1 New York Codes, Rules and Regulations. Title 6. Chapter V. Resource Management Services. Part 550. Promulgation and Enforcement of Rules and Regulations. Sections 550.1(a) and 550.2(b). <http://www.dec.ny.gov/regs/4467.html>
- 2 For example, oil and gas facilities that discharge wastewater or stormwater require a State Pollutant Discharge Elimination System (SPDES) permit. The Division of Water (DOW) has primary responsibility for technical review of these permits, and inspection of these facilities. (Source: *Revised Draft Supplemental Generic Environmental Impact Statement (SGEIS) for "Well permit issuance for horizontal drilling and high-volume hydraulic fracturing to develop the Marcellus Shale and other low-permeability gas reservoirs."* 2011. pp. 8-32 and 8-46. <http://www.dec.ny.gov/energy/75370.html>)
- 3 "While the process of preparing the SGEIS is ongoing, any entity that applies for a drilling permit for horizontal drilling in the Marcellus Shale and opts to proceed with its permit application will be required to undertake an individual, site-specific environmental review." (Source: DEC web site: "Oil and Gas." <http://www.dec.ny.gov/energy/205.html>)
- 4 New York Department of Environmental Conservation (DEC). *Revised Draft SGEIS*. Executive Summary. p. 4. http://www.dec.ny.gov/docs/materials_minerals_pdf/rdsgeisexecsum0911.pdf
- 5 Email from New York Division of Mineral Resources <dmnog@gw.dec.state.ny.us> to Lisa Sumi, Earthworks. Sept 31, 2011.
- 6 See Earthworks' "New York Inspections Statistics" table for more details: http://www.earthworksaction.org/images/uploads/Table_new_york_inspection_statistics_footnotes.gif
- 7 For other states reviewed by Earthworks, visit: <http://enforcement.earthworksaction.org>
- 8 Active wells. Generally, active wells refer to wells that are operating, as opposed to wells that have been permanently plugged or temporarily shut-in or abandoned. Inactive wells should also be monitored.
- 9 Data on inspections and active wells from: New York Division of Mineral Resources (DMR). *Oil, Gas and Mineral Resources Annual Reports* (2000 to 2009). Available at: <http://www.dec.ny.gov/pubs/36033.html>. 2010 data on inspections from: McAllister, E. June 29, 2011. "Insight: NY water at risk from lack of natgas inspectors?" *Reuters*. <http://www.reuters.com/article/2011/07/29/us-newyork-shale-drilling-idUSTRE7655FA20110729>. 2010 data on active wells from: New York DEC web site: "Yearly oil and gas production files." 2010. Filtered by Well Status = AC (active). <http://www.dec.ny.gov/energy/1601.html>
- 10 We assumed that each inspection occurred at a different well. However, some wells in New York were most likely visited more than once, as the DEC says it inspects new well sites both during the permit application and during the drilling process. So the actual number of New York's uninspected wells was probably more than the number indicated in the table (see endnote 11).
- 11 See Earthworks' Table "Estimated Number of Active Wells That Were Not Inspected in 2010" for citations: http://www.earthworksaction.org/images/uploads/Table_active_wells_not_inspected_footnotes.gif
- 12 New York DMR. 2009 Oil, Gas and Mineral Resources Annual Report. p. 20. <http://www.dec.ny.gov/pubs/36033.html>
- 13 For more details see the table "Suggested Inspection Frequencies in PA, ND and NY" on Earthworks' New York Enforcement - Inspections web page: http://www.earthworksaction.org/issues/detail/new_york_oil_gas_enforcement_inspections
- 14 New York DEC. "2011 Recommendations for Permitting High-Volume Hydraulic Fracturing." <http://www.dec.ny.gov/energy/75664.html>
- 15 New York DEC. pp. 27, 28, Executive Summary. *Draft SGEIS*. http://www.dec.ny.gov/docs/materials_minerals_pdf/rdsgeisexecsum0911.pdf
- 16 New York DMR Annual Reports do not contain any violations data. Reports available at: <http://www.dec.ny.gov/pubs/36033.html>
- 17 See table "Enforcement Actions and Penalties in New York," on Earthworks' New York - Enforcement Actions web page: http://www.earthworksaction.org/issues/detail/new_york_oil_gas_enforcement_penalties_sanctions
- 18 New York Consolidated Laws. Environmental Conservation. Article 71. Enforcement. Title 13. Enforcement of Article 23 (Mineral Resources). Section 71-1307. Sanctions. [http://public.leginfo.state.ny.us/LAWSSEAF.cgi?QUERYTYPE=LAWS+&QUERYDATA=\\$ENV71-1307\\$\\$@TXENV071-1307*&LIST=LAW+&BROWSER=BROWSER+&TOKEN=13266643+&TARGET=VIEW](http://public.leginfo.state.ny.us/LAWSSEAF.cgi?QUERYTYPE=LAWS+&QUERYDATA=$ENV71-1307$$@TXENV071-1307*&LIST=LAW+&BROWSER=BROWSER+&TOKEN=13266643+&TARGET=VIEW)
- 19 PA ACT 13 of 2012. Title 58. Part III. Chapter 32. Subchapter E. Enforcement and Remedies. §3256. Civil penalties. <http://files.dep.state.pa.us/OilGas/BOGM/PortalFiles/OilGasReports/2012/act13.pdf>
- 20 Texas Natural Resources Code. Title 3. Oil and Gas; Subtitle B. Conservation and Regulation of Oil and Gas; Chapter 85. Conservation of Oil and Gas; Subchapter A. General Provisions; Section 85.381. Penalty for violation of laws, rules and orders. <http://www.statutes.legis.state.tx.us/Docs/NR/htm/NR.85.htm>
- 21 Searches were performed using the Office of Hearing and Mediation Services Docket Management System (http://www.dec.ny.gov/cfm/extapps/docket/index.cfm?pg=live_docket_options&newssearch=1) and Hearings and Decisions system (<http://www.dec.ny.gov/hearings/395.html>). Very few enforcement cases relating to violations of oil and gas rules were found. No other databases of enforcement actions were found on the DEC web site or on the Attorney General's web site (<http://www.ag.ny.gov/bureau/environmental-protection-bureau>)
- 22 New York DMR, Bureau of Oil & Gas Permitting and Management web site: <http://www.dec.ny.gov/about/801.html>
- 23 On Sept. 27, 2011 a request was made by Earthworks to the DMR Bureau of Oil and Gas Permitting and Management for information regarding citizen complaints: "Does the Bureau maintain a database on citizen complaints? Is this database accessible by the public? If it is not publicly accessible, can you provide any statistics on the number of citizen complaints related to oil and gas facilities in the years 2005 through 2011? Also, do you keep records on how the complaints were dealt with?" The response from DMR was "The Division of Mineral Resources does not currently have a database for the information requested below. We are preparing to have one in operation at the time high-volume hydraulic fracturing activities are approved to go forward in the state." Email from DMR, Sept. 30, 2011.
- 24 Railroad Commission of Texas. Sept. 2009. Self Evaluation Report. Sunset Advisory Commission. p. 102. <http://www.sunset.state.tx.us/82ndreports/rct/ser.pdf>
- 25 See Earthworks' Pennsylvania Enforcement - Public Participation web page: http://www.earthworksaction.org/issues/detail/pennsylvania_oil_gas_enforcement_the_public_role
- 26 DEC has proposed that "county health departments retain responsibility for initial response to most water well complaints, referring them to the Department when causes other than those related to drilling have been ruled out. The exception to this is when a complaint is received while active operations are underway within a specified distance; in these cases, the Department will conduct a site inspection . . ." (Source: New York DEC. Revised Draft SGEIS 2011. Chapter VIII. p. 8-5. http://www.dec.ny.gov/docs/materials_minerals_pdf/rdsgeisch80911.pdf)



EARTHWORKS™
OIL & GAS ACCOUNTABILITY PROJECT



Earthworks' OGAP • P.O. Box 171 • Willow NY, 12495 • 315.677.4111
EARTHWORKS • 1612 K St., NW, Suite 808 Washington, D.C., USA 20006
www.earthworksaction.org • www.ogap.org