



Enforcement Report **OH DOGRM**

OHIO DIVISION OF OIL
AND GAS RESOURCES
MANAGEMENT

**Inadequate enforcement
means current Ohio oil and gas
development is irresponsible**

SEPTEMBER 2012



Failure to adequately enforce
existing drilling rules is harming
Ohio's public health, safety,
and environment



EARTHWORKSTM

OIL & GAS ACCOUNTABILITY PROJECT

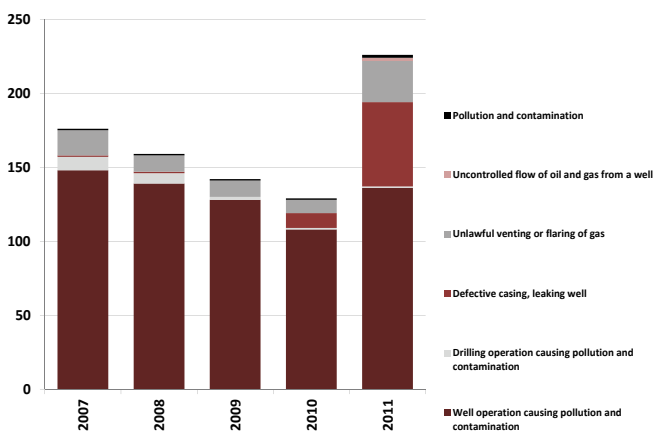
Ohio's Oil & Gas Enforcement

DOGRM — IT IS TIME FOR SERIOUS INSPECTIONS AND ENFORCEMENT

The Division of Oil and Gas Resources Management (DOGRM) within Ohio's Department of Natural Resources (DNR) is responsible for oil and gas permitting and enforcement.¹ Prior to October 2011, the oil and gas program was under the Division of Mineral Resources Management.²

Since the 1850s close to 300,000 oil and gas wells have been drilled in Ohio. Many of these wells have been abandoned, and most of Ohio's 64,500 active wells are classified as "stripper" wells, which produce minimal amounts of oil and gas on a daily basis.³ Despite low production, stripper wells still require regulatory oversight,⁴ as do abandoned wells, which caused more than 40 cases of private water supply contamination in Ohio between 1983 and 2007.⁵

Ohio has yet to experience the oil and gas shale drilling boom of its neighbor Pennsylvania, where more than 5,700 shale gas wells have been drilled since 2005.⁶ As of April 2012, just 112 horizontal oil and gas wells had been drilled in shale formations in Ohio.⁷ The state of Ohio, however, is expected to experience "a significant increase in future drilling," because much of the state sits over the Utica Shale formation, which is predicted to hold large natural gas reserves and potentially oil, and significant leasing of the Utica shale has already occurred.⁸ Our research shows DOGRM is not prepared for an oil and gas boom



Pollution-related Oil and Gas Violations in Ohio

Environmental impacts are already on the rise, even though a shale gas and oil drilling boom is just beginning in Ohio. Pollution-related violations are at their highest level in years. It must be noted that this chart does not include all oil- and gas-related spills, because Ohio operators are not required to report spills to DOGRM. Reporting spills is required in most other oil-and-gas-producing states.⁹

and that the agency does not adequately enforce existing regulations at current drilling levels. Most importantly:

- The inspection force is severely understaffed.
- Oversight of pollution violations is hampered because spills are not reported.
- Fines are rarely levied for violations.
- Penalties are inadequate to punish or prevent irresponsible behavior by oil and gas operators.

Inspection Rate – POOR GRADE

Relative to other states we reviewed, Ohio ranks low in terms of how many inspections it conducts per year. As shown in the table below, Ohio has more active oil and gas wells than either Colorado or New Mexico, but in 2010 Ohio inspectors conducted half the number of inspections of their New Mexico counterparts, and only 65 percent of what inspectors in Colorado performed.¹⁰



Despite staff increases, inspectors can't keep up with wells requiring oversight.

Strikingly, in 2010 Ohio failed to perform inspections at 91 percent of the state's active

oil and gas wells. **That is, more than 58,000 active oil and gas wells had no regulatory oversight that year.**

There were 21 oil and gas inspectors in Ohio in 2010. That year, the Oil and Gas Law was updated, with the intention of adding 33 new regulatory staff.¹¹

In 2011, there were 27 inspectors in the state.¹² The additional staff did little to relieve the enormous burden placed on each inspector. With 64,500 active wells in 2011, each inspector had oversight responsibility for an average of 2,388 active wells.¹³ It is impossible for one inspector to visit, let alone carefully inspect, more than two thousand active well sites a year.

Clearly, DOGRM is incapable of inspecting Ohio's existing wells, and without substantial, systemic improvements, cannot provide adequate oversight for the anticipated addition of thousands of new shale oil and gas wells that may be developed in both the Marcellus and the Utica Shale formations.

More than 91% of active oil and gas wells in Ohio 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 (est.)	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	9,374	5,644	64,378	58,734	91%
Pennsylvania	15,368	8,565	91,167	82,602	91%
Texas	121,1231	121,123 (est.)	282,896	161,773	57%

Violations – WHEN INSPECTORS GO LOOKING, THEY FIND VIOLATIONS

Data obtained through DOGRM's Risk Based Data Management System (RBDMS) show that violations of oil and gas rules have been declining since 2004, but surged in 2011.¹⁴

The increase may be due to the fact that inspections also increased in 2011. As seen in the chart below, in Ohio oil and gas violations are closely tied to the number of inspections.¹⁵

The recent rise in violations is particularly troublesome because, as seen on the chart on the previous page, it has led to increased environmental pollution.¹⁶

Enforcement Actions – FINES INFREQUENTLY LEVIED, INADEQUATE TO DETER VIOLATORS

No statistics or information on enforcement actions and penalties could be found on the DOGRM website or in its publications, but DOGRM provided Earthworks with data for this report.¹⁷

As seen in the chart (bottom, right) DOGRM does not pursue many enforcement actions against oil and gas violators, and the enforcement rate has declined since 2008. That year, one penalty was issued for every 23 violations. In 2011 one penalty was issued for every 57 violations.¹⁸

There has been a small increase in total fines assessed (from \$16,500 in 2008 to \$74,000 in 2011), but the amount of individual fines remains a pittance.¹⁹

In 2005, it was reported that "The DMRM [now DOGRM] seeks to resolve most issues without the use of penalties, finding that it improves compliance." This is not surprising given that up until 2012 the maximum fine for violating an oil and gas rule was capped at \$20,000, far too low to be a deterrent of bad practices.²⁰

In June 2012, Senate Bill 315 was passed. According to DOGRM,

It established "mandatory daily fines for well operators who violate the law."²¹ For most violations the maximum fine is \$4,000 per day, although violations related to transporting and injecting brine without a permit have a maximum penalty of \$20,000 per day. Pollution of drinking water or endangerment of health and safety only garners a daily penalty of \$10,000.²²

It remains to be seen how often these "mandatory" penalties will be applied, and how these new penalties will affect operator compliance.



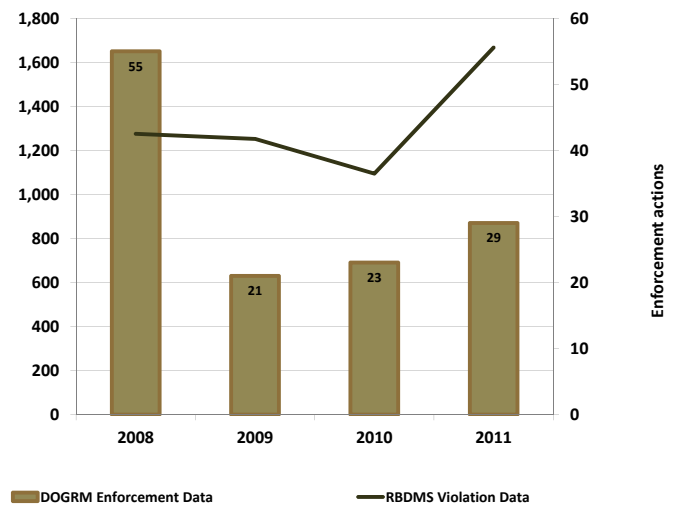
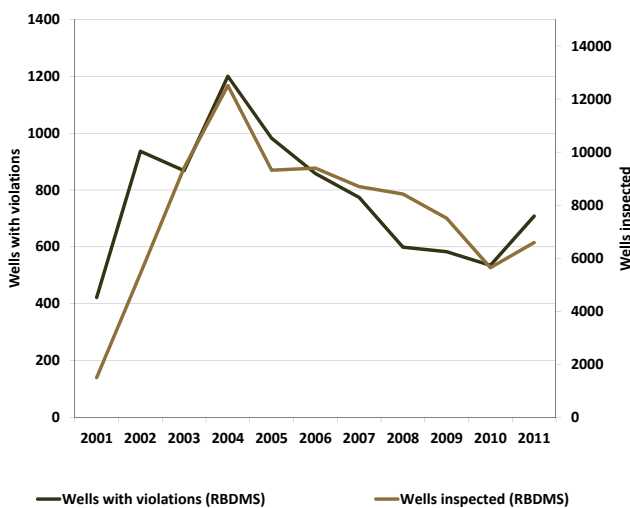
91 percent of Ohio's wells were not inspected in 2010.

Accountability and the Public's Role – CITIZEN COMPLAINTS ON THE RISE; PUBLIC DATA ACCESS NEEDS IMPROVEMENT

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."²³ In Pennsylvania, complaints led to the discovery of at least 700 violations between 2007 and 2011.²⁴

Citizen complaints related to oil and gas operations in Ohio rose dramatically in 2011. From 2010, complaints jumped from 146 to 411 complaints.²⁵

The DOGRM website states that the division responds to questions or complaints within 24 hours either by telephone or in person. But DOGRM does not have a publicly accessible database of complaints, so it is impossible to track the nature of the various complaints, or whether the complaints were resolved in a timely manner and to the satisfaction of those filing them.²⁶



Oil and Gas Inspections in Ohio

RBDMS data seems to confirm a relationship between the number of wells inspected and the number of wells found in violation.

For example, the most wells were inspected in 2004. That was also the year with the most wells with violations. As the number of wells inspected declined (e.g., from 2005 to 2010), fewer wells were found to be in violation.

In other words, when Ohio inspectors go looking, they find violations.

Oil and Gas Enforcement Actions and Violations in Ohio

The number of penalized violations decreased from 55 in 2008 to 29 in 2011.

It's not clear if the drop in number of enforcement actions since 2008 is due to a lack of staff resources to undertake enforcement efforts.

Regardless of the reason, the message sent to would-be violators is clear: breaking the law has minor or no consequences.



The relationship between the number of wells inspected and the number of wells found in violation shows that when Ohio inspectors go looking, they find violations.

In addition, because Ohio does not provide detailed information regarding citizen complaints, it is not clear why complaints more than doubled from 2010 to 2011. DOGRM should foster relationships with communities by ensuring that citizens' complaints are tracked by the agency, and are not just responded to but are resolved in a timely manner.

The Path Forward

Our review of Ohio's enforcement of oil and gas regulations shows DOGRM does not have the regulatory tools to adequately enforce its rules. With a potential boom in oil and gas development on the horizon, it is imperative that shortcomings in oil and gas enforcement in Ohio be remedied as soon as possible. We believe there should be a new rulemaking focusing exclusively on enforcement. **Those new rules should address:**

INSPECTIONS

- Develop comprehensive and binding inspection protocols for all wells, not just active wells.
- 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 so as 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 fine amounts and actions, especially against the worst operators (such as polluters, repeat offenders and those with the most fines) to encourage better practices and deter potential violators.

THE PUBLIC'S ROLE

- Strengthen relationships with citizens by responding to and resolving citizen complaints in a timely and thorough manner and maintaining communication with the residents of properties where violations have occurred.
- Require operators to report spills of oil, gas liquids, produced water and chemicals
- Collect and track comprehensive data regarding spills, citizen complaints and oil and gas enforcement – including facilities of concern, nature of complaint/incident, DOGRM follow-up and resolution, violations found, enforcement actions taken, and penalties levied/collected.
- Publish comprehensive oil and gas enforcement data (on inspections, violations, enforcement actions taken, and penalties levied/collected) online, in a publicly accessible, searchable format. Make data available on a well-by-well basis and by bulk download.

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

ENDNOTES

- 1 Ohio Department of Natural Resources, Division of Oil and Gas Resources Management (DOGRM) web site. <http://www.ohiodnr.com/tabid/10371/default.aspx>
 - 2 Ohio DOGRM. 2011. Summary of Ohio Oil and Gas Activities. <http://www.ohiodnr.com/portals/11/publications/pdf/oilgas11.pdf>
 - 3 Ohio DOGRM. "Oil and Gas Program History." <http://ohiodnr.com/mineral/program/tabid/17865/default.aspx>
 - 4 Oil and gas agencies need to regularly inspect stripper well sites to ensure that wells are maintained to prevent pollution and safety problems because corrosion, and consequently leaks of produced water and hydrocarbons, can be a problem for stripper wells. (Source: James, J. et al. 2003. A Study to Evaluate the Effect of Cost of Corrosion on Stripper Well Operations. p. 6. <http://www.netl.doe.gov/technologies/oil-gas/publications/SWCReports/2002FinalReports/2002JE.pdf>) Moreover, this oversight requires just as much time and attention as non-stripper wells. According to the agency that oversees Texas oil and gas development, "it takes just as much effort to perform an inspection... for a well producing one barrel of oil per day as it does for a well producing 100 barrels of oil per day." (Source: Railroad Commission of Texas. June 18, 2010. Strategic Plan for the Fiscal Years 2011 to 2015. p. 37. <http://www.rrc.state.tx.us/about/statplan10/stratplan2011-2015.pdf>)
 - 5 Kusnetz, N. April 4, 2011. "Deteriorating oil and gas wells threaten drinking water, homes across the country," ProPublica. <http://www.propublica.org/article/deteriorating-oil-and-gas-wells-threaten-drinking-water-homes-across-the-co>
 - 6 Pennsylvania Department of Environmental Protection. Well Permit Workload Report for the week of 07/09/2012 to 07/13/2012. Accessed 07/25/12. http://www.portal.state.pa.us/portal/server.pt/community/oil_and_gas_reports/20297
 - 7 Ohio DOGRM. "Oil and natural gas well and shale development resources." Data accessed April 12, 2012. <http://www.ohiodnr.com/oil/shale/tabid/23174/Default.aspx>
 - 8 Ohio Environmental Protection Agency. "Drilling for natural gas in Marcellus and Utica Shales." <http://www.epa.ohio.gov/shale.aspx> and Downing, B. March 25, 2012. "New players staking claims to Ohio's Utica shale land," Beacon Journal. <http://www.ohio.com/news/local/new-players-staking-claims-to-ohio-s-utica-shale-land-1.284636>
 - 9 States like Colorado, Texas and Pennsylvania require oil and gas operators to report spills of crude oil, condensate or other produced liquids (typically for spills greater than 5 barrels) to state agencies that regulate oil and gas. Ohio does not have such a reporting requirement, even though the 2011 review by STRONGER Inc. recommended that Ohio implement such a requirement. (Source: State Review of Oil and Natural Gas Environmental Regulations (STRONGER), Inc. Jan. 2011. Ohio Hydraulic Fracturing State Review. pp. 12, 13. http://www.dnr.state.oh.us/Portals/11/oil/pdf/stronger_review11.pdf)
 - 10 See Earthworks' table "Estimated number of wells not inspected in 2010" for more details: http://www.earthworksaction.org/images/uploads/Table_active_wells_not_inspected_footnotes.gif
 - 11 Inspection number from: State Review of Oil and Natural Gas Environmental Regulations (STRONGER), Inc. June 2005. Ohio Follow-up and Supplemental Review. p.15. http://www.dnr.state.oh.us/Portals/11/oil/pdf/stronger_review05.pdf
- Oil and Gas Law updated by Senate Bill 165. The bill's fiscal note estimated that 33 oil and gas positions would be added but didn't specify how many would be inspectors. (Source: Ohio Legislative Service

- Commission. March 31, 2010. Fiscal Note & Local Impact Statement for Sub. S.B. 165 of the 128th G.A. <http://www.lsc.state.oh.us/fiscal/fiscalnotes/128ga/sb0165en.htm>)
- 12 Based on current listing of oil and gas field inspectors. Does not include supervisors, but does include back-up inspectors. (Accessed March 7, 2012). <http://www.ohiodnr.com/mineral/inspectors/tabid/10355/Default.aspx>
 - 13 See Earthworks' table "Ohio Inspection Data" for more details: http://www.earthworksaction.org/images/uploads/Table_ohio_inspection_data_new.gif
 - 14 DOGRM provided Earthworks with violation statistics that differed from what we found in their publicly accessible Risk Based Data Management System database. Please visit our Ohio Enforcement – Violations web page for a discussion of the differences. http://www.earthworksaction.org/issues/detail/ohio_oil_gas_enforcement_violations
 - 15 See Earthworks' table "Oil and gas inspections and violations (2001 – 2011)" for more details: http://www.earthworksaction.org/images/uploads/Ohio_table_inspections_and_violations_2001-2011_footnotes.gif
 - 16 See Earthworks' table "Ohio pollution-related violations" for data and references. http://www.earthworksaction.org/images/uploads/Table_ohio_violations_with_footnotes_new.gif
 - 17 Data on enforcement actions and penalties from Ohio Division of Oil and Gas Resources Management (DOGRM). Email request for data made Sept. 16, 2011. Data received Oct. 4, 2011. Updated information received March 1, 2012. Beth Wilson, Public Information officer with Ohio DOGRM.
 - 18 See Earthworks' table "Ohio oil and gas enforcement actions and penalties." http://www.earthworksaction.org/images/uploads/Ohio_table_enforcement_and_penalties_footnotes.gif
 - 19 *ibid.* Average penalty per enforcement action calculated by dividing the penalties collected by the number of enforcement actions.
 - 17 State Review of Oil and Natural Gas Environmental Regulations (STRONGER), Inc. June 2005. Ohio Follow-up and Supplemental Review. p.15. http://www.dnr.state.oh.us/Portals/11/oil/pdf/stronger_review05.pdf
 - 18 Ohio Revised Code. Title 15. Chapter 509. 1509.33 Civil Penalties. <http://codes.ohio.gov/orc/1509.33>
 - 19 Eggert, D. and Hunt, S. Feb. 9, 2012. "DeWine wants tougher laws on fracking," Columbus Dispatch. <http://www.dispatch.com/content/stories/local/2012/02/09/dewine-wants-tougher-laws-on-fracking.html>
 - 20 In the past, unlike many states, Ohio was not able to penalize operators for each continuing day of violation. SB 315, passed in June 2012, enabled DOGRM to levy penalties for each day of violation.
 - 21 Ohio DOGRM web site: "SB 315 Key Points Summary." <http://www.ohiodnr.com/tabid/23947/Default.aspx>
 - 22 Ohio Revised Code. Title 15. Chapter 509: Division of Oil and Gas Resources Management. 1509.33 Civil Penalties. <http://codes.ohio.gov/orc/1509.33>
 - 23 Railroad Commission of Texas. Sept. 2009. Self Evaluation Report. Sunset Advisory Commission. p. 102. <http://www.sunset.state.tx.us/82ndreports/rct/ser.pdf>
 - 24 Pennsylvania Department of Environmental Protection. eFACTS database. Inspection Search: Inspection Type = Complaint Inspection; Program = Oil and Gas. http://www.ahs2.dep.state.pa.us/eFACTSWeb/criteria_inspection.aspx
 - 25 Email request for data made Sept. 16, 2011. Data received Oct. 4, 2011. Updated information received March 1, 2012. Beth Wilson, Public Information officer with Ohio DOGRM.
 - 26 Ohio DOGRM web site: "Oil and Gas Regulatory Enforcement." <http://www.ohiodnr.com/mineral/enforcement/tabid/17872/Default.aspx>

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