

Summary of Groundwater Sampling Rules

Please send additions or corections to Kathryn.mutz@colorado.edu

State	Groundwater Sampling?	Agency	Summary of Groundwater Rules	Citation
Colorado Current	No statewide mandatory sampling			
	COGA Voluntary Baseline Groundwater Quality Sampling Program	COGA/COGCC	Water samples will be collected from the two closest groundwater features with reasonable access, such as permitted and registered groundwater wells or groundwater seeps and springs, which are located within ½ mile of the surface location of newly developed oil and gas well pads or new expansions of existing oil and gas well pads. These baseline samples will be collected prior to the setting of the well conductor casing. A second sample will be collected from each of the groundwater features within one year of well completion, unless prior notification is filed with the Colorado Oil and Gas Conservation Commission (COGCC). Post-completion samples will also be collected from wells from which baseline samples were collected in response to landowner complaints of a distinct or measurable change in water quality, such as a change in odor, color, taste, or turbidity. If the landowner grants expeditious access and agrees that all data may be released to COGCC for posting to a public database, operators will make a best effort to collect a sample within 48 hours of notification. Operators will notify the COGCC upon receipt of a complaint.	http://www.coga.org/pdfs_facts/COGA-sample-analysis-Plan.pdf
	Yes, for COGCC's Greater Wattenburg Area. Rule 318A.e.(4).	COGCC	For certain infill or boundary wells: Required baseline testing of the nearest water well prior to the first gas well proposed within a governmental section.	318A. http://cogcc.state.co.us/RR_Docs_new/rules/300Series.pdf
	Yes, for Surface Water Supply Areas. Rule 317B	COGCC	Within 300 feet of Surface Water Supply Area: Prohibited, but variance available 301-500 feet: When sufficient water exists in the Classified Water Supply Segment, collection of baseline surface water data consisting of a pre-drilling surface water sample collected immediately downgradient of the oil and gas location and follow-up surface water data consisting of a sample collected at the same location three (3) months after the conclusion of any drilling activities and operations or completion 501-2640: Same as 301-500.	317B. http://cogcc.state.co.us/RR_Docs_new/rules/300Series.pdf
Colorado Proposed	Yes. Proposed Rule 609.	COGCC	Initial baseline samples and subsequent monitoring samples shall be collected from two (2) groundwater sources or springs within a one-half (1/2) mile radius of the proposed Oil and Gas Location. Timing of initial sampling: (1) Prior to commencement of drilling or, on Oil and Gas Locations where no wells are planned, prior to commencement of installation of an Oil and Gas Facility on the Location; and (2) Prior to re-stimulation of a well if more than twelve (12) months have passed since the initial, pre-drilling sampling event or the most recent re-stimulation sampling event was conducted. Subsequent monitoring sampling: Subsequent monitoring sampling shall be conducted: (1) Not less than 12 months, nor more than 18 months, following any well completion or facility installation; and (2) Not less than sixty (60) months, nor more than seventy-eight (78) months, after the last sampling event performed pursuant to Rule 609.d.(1). Wells that are drilled and abandoned without ever producing hydrocarbons are exempt from this requirement. (3) Additional "post-completion" test(s) may be required if changes in water quality are identified during follow-up testing. (4) The Director may require further water well sampling at any time in response to complaints from water well owners.	http://cogcc.state.co.us/RR_HF2012/Groundwater/RevisedProposedRule609.pdf
Ohio	Yes. SB 315	Ohio Department of Natural Resources	SB 315 expands pre-drilling water sampling requirements to 1,500 feet and applies this standard to both urban and rural areas. Previously, water wells were tested within 300 feet of oil and gas wells in urban areas. Water wells in rural areas were not tested previously. Does not appear to require any post-completion sampling.	http://www.legislature.state.oh.us/bills.cfm?ID=129_SB_315
New York	Yes, in proposed revised draft SGEIS (The public comment period concluded on January 11, 2012)	New York State Department of Environmental Conservation (DEC)	Operators required (as a permit condition) to sample all water wells within 1,000 feet of the pad, subject to permission from property owner, or within 2,000 feet of pad if no wells are available for sampling within 1,000 feet either because there are none of record or because the property owner denies permission. Schedule: Initial sampling and analysis prior to site disturbance at the first well on the pad, and prior to drilling commencement at additional wells on multi-well pads; Sampling and analysis three months after reaching total measured depth (TMD) at any well on the pad if there is a hiatus of longer than three months between reaching TMD and any other milestone on the well pad that would require sampling and analysis; and Sampling and analysis three months, six months and one year after hydraulic fracturing operations at each well on the pad.	http://www.dec.ny.gov/docs/materials_minerals_pdf/rdsgeisch70911.pdf

Pennsylvania	Rebuttable "zone of presumption" for water pollution.	Pennsylvania Department of Environmental Protection, Office of Oil and Gas Management	<p>A well operator who affects a public or private water supply by pollution or diminution must restore or replace the affected water supply with an alternate source of water adequate in quality and quantity for the purposes served by the supply. This replaced or restored water supply must meet to the greater of pre-existing water quality standards or water quality standards established by the Pennsylvania Safe Drinking Water Act.</p> <p>Act 13 increased the presumption of liability for water supply contamination for unconventional wells. Unless rebutted, the Act presumes that an operator is responsible for pollution of a water supply if the affected water supply is 2,500 feet from an unconventional well and that pollution occurred within 12 months of the later of completion, drilling, stimulation or alteration of the unconventional well.</p> <p>Operators found to have impacted water supplies within the time and distance provisions of the presumption of liability must provide temporary potable water until the supplies are restored or replaced.</p> <p>Unconventional well operators must provide written notice to landowners or water purveyors that the rebuttable presumption may be void if the landowner or water purveyor refuses the operator access to conduct a pre-drilling or pre alteration survey.</p>	http://files.dep.state.pa.us/OilGas/BOGM/BOGMPortalFiles/OilGasReports/2012/act13.pdf
West Virginia	Rebuttable presumption of operator liability if water is contaminated	WV Dep't of Environmental Protection	<p>§22-6A-18: there is a rebuttable presumption that the drilling and the oil or gas well or either was the proximate cause of the contamination or deprivation of the fresh water source or supply within 1500 feet. Defenses (operator has burden of proving by preponderance of evidence):</p> <p>(1) The pollution existed prior to the drilling or alteration activity as determined by a predrilling or prealteration water well test.</p> <p>(2) The landowner or water purveyor refused to allow the operator access to the property to conduct a predrilling or prealteration water well test.</p> <p>(3) The water supply is not within one thousand five hundred feet of the well.</p> <p>(4) The pollution occurred more than six months after completion of drilling or alteration activities.</p> <p>(5) The pollution occurred as the result of some cause other than the drilling or alteration activity.</p>	http://www.legis.state.wv.us/Bill_Status/bills_text.cfm?billdoc=hb401%20enr.htm&yr=2011&sesstype=4X&i=401
Alaska	No. But statutory and regulatory authorization of groundwater sampling is strong.	Alaska Oil and Gas Conservation Commission	<p>Alaska Oil and Conservation Act (State Law):</p> <p>31.05.030(j) For exploration and development operations involving nonconventional gas, the commission</p> <p>(1) may not</p> <p>(A) issue a permit to drill under this chapter if the well would be used to produce gas from an aquifer that serves as a source of water for human consumption or agricultural purposes unless the commission determines that the well will not adversely affect the aquifer as a source of water for human consumption or agricultural purposes; or</p> <p>(B) allow injection of produced water except at depths below known sources of water for human consumption or agricultural purposes;</p> <p>(2) shall</p> <p>(A) regulate hydraulic fracturing in nonconventional gas wells to ensure protection of drinking water quality;</p> <p>(B) regulate the disposal of wastes produced from the operations unless the disposal is otherwise subject to regulation by the Department of Environmental Conservation or the United States Environmental Protection Agency;</p> <p>From the Regs:</p> <p>20 AAC 25.534. Tests, surveys, and inspections</p> <p>(a) As the commission considers necessary or advisable to carry out the purposes of AS 31.05 (Alaska Oil and Gas Conservation Act) and this chapter, the commission will require that tests or surveys be made to determine the</p> <p>...</p> <p>(4) risk of fluid movement into freshwater.</p> <p>(b) The commission will, in its discretion, exercise its statutory power to enter and conduct on-site investigations and inspections at reasonable times of facilities, equipment, practices, records, or operations for the purpose of ensuring compliance with the requirements of this chapter.</p>	<p>Title 20 Chapter 25 (The Regs):</p> <p>http://www.legis.state.ak.us/basis/folioiproxy.asp?url=http://www.jnu01.legis.state.ak.us/cgi-bin/folioisa.dll/aac/query=JUMP:Title20Chap25/doc/@1?firsthit</p> <p>Alaska Oil and Conservation Act Title 31 Oil and Gas:</p> <p>http://www.legis.state.ak.us/basis/folioiproxy.asp?url=http://www.jnu01.legis.state.ak.us/cgi-bin/folioisa.dll/statb07/query=3112E0512E030/doc/{t13554}</p>
Arkansas	No	Arkansas Oil and Gas Commission		<p>General Rules and Regulations:</p> <p>http://www.aogc.state.ar.us/OnlineData/Forms/Rules%20and%20Regulations.pdf</p>
California	No. "May require" language.	State of California Department of Conservation, Division of Oil, Gas, & Geothermal Resources	3106(c): The supervisor may require an operator to implement a monitoring program, designed to detect releases to the soil and water, including both groundwater and surface water, for aboveground oil production tanks and facilities.	CALIFORNIA LAWS FOR CONSERVATION OF PETROLEUM & GAS: ftp://ftp.consrv.ca.gov/pub/oil/laws/PRC01.pdf
Alabama	No. Vague "special precautions" provision.	State Oil and Gas Board of Alabama	400-2-4-.02, Protection of Freshwater Resources. An operator shall conduct all oil and gas operations in a manner so as to prevent the pollution of all freshwater resources. All fresh waters and waters of present or probable future value for domestic, municipal, commercial, stock, or agricultural purposes shall be confined to their respective strata and shall be adequately protected. Special precautions shall be taken to guard against any loss of artesian water from the strata in which it occurs, and the contamination of fresh water by objectionable water, oil, condensate, gas, or other deleterious substance to such fresh water.	http://www.gsa.state.al.us/documents/misc_ogb/goldbook.pdf
North Dakota	Not required	North Dakota Industrial Commission, Department of Mineral Resources, Oil and Gas Division	38-11.1-06. Landowners within one-half mile of a gas well who can prove that their water quality or quantity has been affected can recover the cost of making such repairs, alterations, or construction that will ensure the delivery to the surface owner of that quality and quantity of water available to the surface owner prior to the commencement of drilling operations. Prima facie evidence of injury under this section may be established by a showing that the mineral developer's drilling operations penetrated or disrupted an aquifer in such a manner as to cause a diminution in water quality or quantity within the distance limits imposed by this section	https://www.dmr.nd.gov/oilgas/rules/rulebook.pdf
Texas	Can't find anything	Railroad Commission of Texas		
Louisiana	Can't find anything	Louisiana Department of Natural Resources		
Oklahoma	Can't find anything	Oklahoma Corporation Commission		