

# ISSUES RURAL COMMUNITIES FACE WHEN ATTEMPTING TO MAXIMIZE LAND USAGE: THE OIL & GAS RESOURCE

by:

David E. Pierce  
Professor of Law  
Washburn University School of Law

Norman R. Pozez Chair in Business and Transactional Law  
Director, Washburn Oil and Gas Law Center

## I. OIL & GAS DEVELOPMENT IMPACTS

### A. Oil & Gas Development is a Non-Sustainable Mining Operation

1. The extraction of oil, gas, and other mineral substances is a “mining” process.
2. The resource, once removed from the rock formation where it is found, will not be replenished during the human time frame.
3. The development process can, however, be extended by careful reservoir management.
4. Community planning for ultimate exhaustion of the resource.
5. Community planning for resource price fluctuations: \$30/barrel oil (yes, that will happen). Today’s oil price: approximately \$100/barrel.

### B. Facility Abandonment, Well Plugging, Site Reclamation

1. ***Will the operator reclaim the land once operations are terminated?***

**K.S.A. §55-177** (2005) (6 months following abandonment of oil and gas well operator must remove operating structures and grade land to leave it “in the same condition . . . as it was before” development, *unless the landowner and operator agree otherwise*).

2. ***Will the operator of a well be able to respond to regulatory commands throughout the life cycle of a well?***

**K.S.A. §55-155** (Supp. 2012) (licensing operators and the statutory obligation to “assure financial responsibility”).

3. ***How will unplugged wells be addressed when the “legally responsible” party is unavailable to respond?***

**K.S.A. §55-179** (2005) (providing for a public fund to be used to address abandoned unplugged wells when no “legally responsible” party can be found).

- a. Does “legally responsible” create a CERCLA-like liability net? Or, is it similar to the Kansas CERCLA counterpart: *E.g.*, **K.S.A. §65-3455** (2005) (rejecting a status-based approach followed by CERCLA and instead employs a fault-based approach: “[a]ny person responsible for the discharge, abandonment or disposal of hazardous substances”).

- b. ***John M. Denman Oil Co., Inc. v. State Corporation Commission***, Case No. 12 -C-402 & 407, *appeal pending*, Appellate Case No. 110,861 (Kan. Ct. App. 2013) (district court created a nuisance analysis to impose strict liability on oil and gas lessees regarding plugging of wells abandoned by others).

4. Legislative programs designed to address the plugging of “orphaned” wells. Programs supported, and funded, by the oil and gas industry.

- a. The industry pays for the costs associated with its regulation through a “conservation fee fund.” **K.S.A. §55-143 (2005) & §55-176** (Supp. 2012). **K.A.R. §82-3-206** (approximately 9¢/barrel of oil) & **K.A.R. §82-3-307** (approximately 1.3¢/Mcf of gas).

- b. 2001 **Well Plugging Assurance Fund** (abandoned well problems for wells drilled after July 1, 1996). **K.S.A. §§55-166 to 55-168** (2005).
- c. 1996 **Abandoned Oil and Gas Well Fund** (abandoned well problems for wells drilled on or before July 1, 1996). **K.S.A. §§55-191 to 55-194** (2005) & **2013 Kan. Sess. Laws 1809-10**.

### C. Regulating Community Impacts

- 1. Most of the rural land use regulation regarding oil and gas operations is the product of agreement.
  - a. Private property: restrictive covenants, mineral deeds, oil and gas leases.
  - b. Public property: negotiated arrangements with operators and the counties where they are operating.
- 2. Public regulation: zoning, health, safety, and welfare regulation by governmental entities.
- 3. Local governments, in many states, are seeking to regulate or prohibit oil and gas development within their jurisdictional boundaries. The most notable development on this topic is the Pennsylvania Supreme Court's ruling in ***Robinson Township v. Commonwealth of Pennsylvania***, 2013 WL 6687290 (Penn. Dec. 19, 2013) (provision preempting local government's ability to address environmental concerns related to oil and gas development violated the Environmental Rights Amendment to the State Constitution).
  - a. **Art. I, §27 of the Pennsylvania Constitution**—the Environmental Rights Amendment:
 

The people have a right to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment. Pennsylvania's public natural resources are the common property of all the people, including generations yet to come. As trustee of these

resources, the Commonwealth shall conserve and maintain them for the benefit of all the people.

- b. Ratified by Pennsylvania voters (by a four-to-one margin) on May 18, 1971.
- c. Could it be used to ban solar or wind energy development?

- (1) "Esthetic values of the environment."

- (2) "We also agree that these Board's findings could reasonably have been found to justify its decision: that the commercial wind farms would adversely, if not dramatically, affect the aesthetics of the county and for that reason should be prohibited." ***Zimmerman v. Board of County Commissioners of Wabaunsee County***, 218 P.3d 400, 418 (Kan. 2009) (upholding ban against any commercial wind resource development within 800 square-mile area comprising Wabaunsee County, Kansas).

- 4. Regulation of oil and gas in Kansas, at the County level, is limited by **K.S.A. §19-101a** (Supp. 2012).

**19-101a. Home rule powers; limitations, restrictions and prohibitions; procedure.** (a) The board of county commissioners may transact all county business and perform all powers of local legislation and administration it deems appropriate, subject only to the following limitations, restrictions or prohibitions:

- (1) Counties shall be subject to all acts of the legislature which apply uniformly to all counties. . . .

- (19) Counties may not regulate the production or drilling of any oil or gas well in any manner which would result in the duplication of regulation by the state corporation commission and the Kansas department of health and environment pursuant to chapter 55 and chapter 65 of the Kansas Statutes Annotated, and amendments thereto, and any rules and regulations adopted pursuant thereto. Counties may not require any license or permit for the

drilling or production of oil and gas wells. Counties may not impose any fee or charge for the drilling or production of any oil or gas well.

5. What is now **K.S.A. §19-101a(19)** was a direct reaction to a Leavenworth County “zoning” fee to obtain a special use permit. ***Billy Oil Co. v. Board of County Commissioners of Leavenworth County***, 732 P.2d 737, 740 (Kan. 1987) (\$200 fee had nothing to do with zoning but was “solely related to what the witnesses denominated as ‘babysitting’ the oil and gas industry.”).
6. Cities in Kansas have broader authority to regulate oil and gas activities within the city’s jurisdictional boundaries. Under certain circumstances enumerated in **K.S.A. §12-715b** (2001) city can exercise its zoning authority “outside the city but within three miles thereof . . . .”
  - a. Constitutional power of home rule “to determine their local affairs and government . . . .” **Kan. Const. art XII, §5(b)**.
  - b. Generally, cities can act to regulate so long as the regulation does not conflict with the underlying goals and purposes of state laws.
  - c. Cities can adopt conflicting regulation when state laws do not apply uniformly to all cities (subject to enumerated exceptions).
  - d. As explained by the court in ***Farha v. City of Wichita***, 161 P.3d 717, 725 (Kan. 2007), even when the legislature expresses its intent to preempt an area for exclusive state regulation, the preemption will not be effective unless the “enactment” if in fact “uniformly applicable to all cities.”
7. Since the inception of the Kansas oil and gas industry it has been the subject of extensive state regulation to control “waste” of the resource, protect correlative rights, and address environmental, health, and safety issues.

#### **D. Direct Industry Funding of State and Local Government**

1. We have already noted the conservation fee fund collected as a tax on the production of oil (9¢/barrel) and gas (1.3¢/Mcf).
2. Subject to a number of exemptions associated primarily with low-producing wells, the State of Kansas receives 8% of the wellhead value of all oil and gas extracted from the ground and sold or used. **K.S.A. §79-4217.**
3. Counties where oil and gas wells are located receive an *ad valorem* tax assessed on the value of the oil and gas in the ground and the related extraction facilities. **K.S.A. §79-330.**
  - a. In 2012 this generated \$225 million in revenue, compared to \$128 million in severance taxes.
  - b. The *ad valorem* tax represents a form of double taxation on the oil and gas (once as it exists in place – the *ad valorem* tax, and again upon production -- severance tax).
4. 8% of the value of oil and gas, as extracted, is paid as a severance tax. **K.S.A. §79-4217.**
  - a. Various exemptions are designed to perpetuate the operation of marginal wells and encourage exploration, production, and enhanced recovery.
  - b. **K.S.A. §79-4219** provides for a 3.67% credit against *ad valorem* taxes paid by the producer.
5. When severance tax revenues are received by the state treasurer, 7% is paid into a “county mineral production tax fund” and 12.41% to an “oil and gas valuation depletion trust fund.” The balance, subject to a collection-sensitive \$10,000,000 “technical education fund,” is credited to the state general fund. **K.S.A. §79-4227.**
  - a. The **county mineral production tax fund** is paid back to the counties in proportion to their contribution to severance tax revenues.

- a. 50% is paid to the county general fund.
  - b. 50% is paid to the general fund of the school district.
- b. The **oil and gas valuation depletion trust fund** is paid to a county when its *ad valorem* tax revenues fall below a level defined by statute. **K.S.A. §79-4231.**
  - (1) 20% of the fund is released each year the county has a qualifying reduction in *ad valorem* tax revenues. **K.S.A. §19-271.**
  - (2) The director of taxation deducts 2% of the money collected as “an administrative fee.” **K.S.A. §79-4231(c).**
  - (3) The released funds go into the county general fund. **K.S.A. §19-271.**
- 6. **Sustainability Note.** All of this revenue is directly impacted by something nobody has control over: the world price of oil.
- 7. The collective tax rate on oil and gas development in Kansas, compared to other states, is high. A study on the tax effect of drilling and completing a Mississippian Lime well in Kansas compared to other states indicated:
  - a. 21.1% higher in Kansas than in Arkansas.
  - b. 54.8% higher in Kansas than in Oklahoma.
  - c. 57.1% higher in Kansas than in Texas.
- 8. Development in Kansas must overcome roughly a 25% reduction in rate of return attributable to state taxes associated with new exploration.

## **E. Impact Payments**

1. Does the tax dollar collected from the industry find its way back to the community impacted by the development?
  - a. Is there a way to account for disproportionate impact?
  - b. Is there an available fund to address problems as they arise?
2. If the tax dollar finds its way back to the community, is there any assurance it will be applied to a development-related impact?
3. Is there any assurance the money will not be diverted through future legislative action?
4. Is there a way to avoid using a non-sustainable and highly volatile source of revenue for general government operations?
5. The short answer to all these questions: "NO." At least for states like Kansas that already have an established pattern of use for oil and gas taxes.
  - a. Probably the best that can be done for a state like Kansas is to avoid aggravating the situation.
  - b. The industry generally favors systems that redirect the maximum amount of revenue back to the impacted communities.

## **II. REDUCING DEVELOPMENT IMPACTS: RULE OF CAPTURE**

### **A. Addressing Real Problems vs. Made-Up Problems**

1. The environmental impact of oil and gas development can be significantly reduced once the environmental community concedes that large scale fossil fuel development will, in fact, take place during the next 30 years.

- a. Members of the environmental community firmly believe that optimal oil and gas development is no development.

*E.g.*, The Natural Resources Defense Council (NRDC) has identified Curbing Global Warming as its top priority noting: "Climate change is the single biggest environmental and humanitarian crisis of our time. We must act now to spur the adoption of cleaner energy sources at home and abroad." Natural Resources Defense Council,

<http://www.nrdc.org/about/> (last visited Jan. 25, 2014).

The NRDC's second priority is "Creating the Clean Energy Future." As the NRDC explains, this second priority is closely related to the first: "America's dependence on fossil fuels threatens our national security and is a major contributor to global warming and toxic air pollution. By investing in renewable energy sources such as the sun, wind and biomass, we can help solve the energy and climate crises." *Id.*

- b. Projections, however, call for a 56% increase in global energy consumption between 2010 and 2040. Fossil fuels are projected to supply 80% of world energy use through 2040 with natural gas being the fastest-growing fossil fuel in use.

U.S. Energy Information Administration, International Energy Outlook 2013 with Projections to 2040, at 1, DOE/EIA-0484 (2013).  
[http://www.eia.gov/forecasts/ieo/pdf/0484\(2013\).pdf](http://www.eia.gov/forecasts/ieo/pdf/0484(2013).pdf).

- c. Oil and gas development will be a major part of the world economy, and that of Kansas, for decades to come.

2. The focus should be on the rule of capture and efficiency instead of hydraulic fracturing and the Keystone Pipeline.
3. The one place where substantial sustainability gains are possible in the oil and gas industry is the rule of capture.

4. It is nothing the industry has done; the courts (common law) did it to the industry, and to the American public.
5. Oil and gas ownership is determined by surface boundaries projected downward.
  - a. Oil and gas are found in rock structures that have the physical characteristics of porosity and permeability.
  - b. The rock structure, the "reservoir rock," is under pressure (geostatic pressure and hydrostatic pressure).
  - c. Drilling a well into the rock structure creates a low pressure area allowing the fluid and gaseous contents of the reservoir to move towards the low pressure area created by the well bore.
  - d. Oil and gas "owned" by one property owner is lost once it migrates into adjacent lands.
  - e. Ownership to oil and gas is "perfected" by extracting it from the ground through a well bore bottomed within your surface boundaries.
  - f. The rule of capture grants ownership to the property owner who captures it through a well located on his or her property – even though it can be proven it migrated from under adjacent lands owned by others.
  - g. The rule of capture triggered excessive drilling and production in an effort to perfect ownership to as much oil and gas as possible – and in the process protect oil and gas beneath an owner's land.
6. To combat some of the wasteful effects of the rule of capture, state legislatures adopted "conservation" statutes that established a minimum block of acreage required to obtain a well permit and limitations on the rate at which a well can remove oil and gas from a reservoir.

- a. "Spacing" regulation refers to a minimum set-back required from surrounding property boundaries.
  - b. "Density" regulation refers to a minimum block of acreage required to drill a well.
  - c. "Production" regulation (or "prorating") refers to restrictions on the rate at which a well can be produced.
  - d. "Pooling" is bringing separate tracts of land together in order to create the minimum block of acreage required to meet spacing, density, or prorating requirements.
  - e. "Unitization" is bringing all or a substantial part of the separate tracts overlying a single reservoir (could be many "pooled" areas) for unified development as a reservoir as opposed to developing it on a competitive capture basis.
7. **The major weakness with the existing oil and gas regulatory regimes:** to enjoy the mineral wealth in your property you must be associated with a well, as opposed to merely being associated with land overlying the reservoir.
- a. This is the distinction between developing a reservoir using "pooled" units as opposed to developing it as a single property using field wide unitization.
  - b. Field wide unitization in Kansas requires the consent of a super-majority of mineral owners and their lessees. See **K.S.A. §§55-1301 to 55-1317** (63%/63% late in the productive life of the field & 75%/63% early in the life of the field, K.S.A. §55-1305).
8. For a general discussion of the failure of oil and gas conservation regulation, the environmental benefits of unitization, and the general neglect of the issue by environmental groups, see: David E. Pierce, *Minimizing the Environmental Impact of Oil and Gas Development by*

*Maximizing Production Conservation*, 85 NORTH DAKOTA L. REV. 759 (2009).

**B. The City of Oxford, Kansas Got It Right -- in 1927**

1. ***Marrs v. City of Oxford***, 24 F.2d 541 (D. Kan.1928), *aff'd*, 32 F.2d 134 (8<sup>th</sup> Cir. 1929), *cert. denied*, 280 U.S. 573 (1929).
2. 1927 ordinance dividing city into drilling units consisting of one well per city block and providing for pooling of all lands within each drilling unit.

**C. The Kansas Legislature Got It Right -- in 1983**

1. **K.S.A. §55-1611** authorizes cities to create drilling units:

“Whenever the governing body of any city authorizes the development of minerals within the corporate limits of the city, ***it may adopt an ordinance dividing the city into drilling units for the production of those minerals.*** The ordinance ***shall require any persons having the right to produce minerals in a drilling unit to pool their rights for the production of such minerals.***”
2. This is probably the most forward-looking single piece of oil and gas legislation in Kansas.
3. For example, if the target reservoir underlies the entire city, it should allow the city to declare a *single* drilling unit, pool all rights within the unit, and then authorize wells where it makes geological sense while protecting surface interests.
  - a. It allows a form of field wide unitization.
  - b. The major limitation: “within the corporate limits of the city . . . .”
  - c. Could the “corporate limits of the city” include the three-mile area under **K.S.A. §12-715b**?
  - d. Cities “authorized to adopt ***zoning regulations*** affecting all or any designated portion of the land

located outside the city but within three miles thereof” when specified conditions are met, the most important being: “The county has specifically excluded the land from county zoning regulations or the county does not have in effect zoning regulations for such area . . . .” **K.S.A. §12-715b(c)**.

4. The act also suggests that cities may have more authority to regulate activities on the unit, once it decides that development can take place. **K.S.A. §55-1612** provides:

“Nothing in this act shall be construed as prohibiting the governing body of any city from adopting any other ordinance ***which does not conflict*** with any state law or rule or regulation ***providing for the protection of the public health, safety or welfare in relation to the production of minerals within the corporate limits of the city.***”

5. The act contains the following limitation: “The provisions of this act shall not apply to any drilling unit in which there is a producing well or wells.” **K.S.A. §55-1613**.
  - a. Although not entirely clear, the intent appears to be to protect the existing ownership in a well that has not been developed in accordance with whatever new program the city may adopt under the act.
  - b. Avoids correlative rights issues associated with adjusting equities in an existing investment under a prior development regime.

### **III. COMPETING LAND USES: AGRICULTURE, WIND, OIL & GAS**

#### **A. Easement Law Will Decide These Issues**

1. Two types of easement:
  - a. Specific (specific location that burdens the land).
  - b. General (“blanket” easement; “floating” easement).
2. ***Aladdin Petroleum Corp. v. Gold Crown Properties, Inc.***, 561 P.2d 818 (Kan. 1977).

- a. If the easement defines the activity, and a precise location where the activity can be conducted, the easement owner can engage in the activity at the stated location.
  - b. If the easement does not define a precise location where an activity can be conducted, then the easement owner can engage in the activity anywhere on the burdened land that is reasonably necessary and convenient to exercise its rights.
  - c. The landowner burdened by the easement can use the land in any manner that does not unreasonably interfere with the easement owner's use. This also defines the extent to which the landowner can authorize others to use the burdened land.
  - d. Placing a permanent structure on land that extends within the boundaries of a definite easement is an unreasonable interference with the easement owner's rights. The remedy in *Alladin*: tear down the obstruction (car ports obstructing part of a road easement).
3. ***Mid-America Pipeline Co. v. Wietharn***, 787 P.2d 716 (Kan. 1990) (proper remedy for constructing buildings over pipeline easement is to remove the buildings).

An obstruction or disturbance of an easement occurs when there is interference that makes use of the easement less convenient and beneficial to the easement owner.

4. ***Brown v. Conoco Phillips Pipeline Co.***, 271 P.3d 1269 (Kan. Ct. App. 2012) (likelihood that tree roots could interfere with pipeline constituted a material interference with the use and enjoyment of the easement justifying removal of the tree).
5. ***Southern Star Central Gas Pipeline, Inc. v. Cunning***, 157 P.3d 1120 (Kan. Ct. App. 2007) (court was able to avoid removal of structure to accommodate a blanket easement because pipeline failed to carry its burden of proof that the structure unreasonably interfered with easement owner's rights).

6. See generally, David R. Green, *Earth and Wind Industries Playing with Fire: The Concurrent Rights of Wind Farm Operators, Oil and Gas Developers, and Landowners in Kansas*, 61 U. KAN. L. REV. 1089 (2013).

## **B. First-In-Time, First-In-Right**

1. First-in-time is first-in-right.
2. The residual rights of the landowner that granted the easement will determine what is available to grant subsequent users.
3. Subsequent users unable to pursue any activity on the burdened land that interferes with, or makes it more difficult to use, existing easement rights.
  - a. May need to acquire the rights from the easement owner.
  - b. Could seek a subordination agreement to change the order of priority.
4. Landowners (their lawyers) must address these issues in their agricultural leases, wind leases, and oil and gas leases, as well as any mineral right conveyances.

## **C. Restatement (Third) of Property: Servitudes**

1. I predict this will be the most influential authority in sorting out easement issues. See generally, David E. Pierce, *Oil & Gas Easements*, 33RD ANNUAL ENERGY & MINERAL L. INST. 318 (2012).
2. **§ 4.9 Servient Owner's Right to Use Estate Burdened by a Servitude.**

“Except as limited by the terms of the servitude determined under § 4.1 [express statement of rights], the holder of the servient estate is entitled to make any use of the servient estate **that does not unreasonably interfere with enjoyment of the servitude.**”

a. Comment c. provides: "The person who holds the land burdened by a servitude is entitled to make all uses of the land **that are not prohibited by the servitude and that do not interfere unreasonably with the uses authorized by the easement or profit.**"

b. Illustration 1. provides an example of a reasonable concurrent use by the burdened landowner:

"O, the owner of Blackacre, which is burdened by an easement for a high-voltage electric transmission line, regularly pastures livestock in an area that includes the easement area. In the absence of facts indicating that the livestock interfere with the easement owner's ability to maintain the transmission line, O is entitled to use the easement area for pasture."

c. Illustration 3. provides an example of an unreasonable concurrent use by the burdened landowner:

"O, the owner of Blackacre, which is subject to an easement for a high-pressure natural gas pipeline, poured a concrete slab and erected a hog barn across the easement. In the absence of other facts and circumstances, O is not entitled to use Blackacre in this manner because the slab and barn will unreasonably interfere with the easement by increasing the difficulty of maintaining and repairing the pipeline."

d. If the wind lease is granted first, routine oil and gas operations would likely be an unreasonable concurrent use of the surface.

e. If the oil and gas lease is granted first, routine wind operations would likely be an unreasonable concurrent use of the surface.

f. Agricultural use is the most flexible. Also, it is unlikely the parties to the agricultural lease intend to limit the landowner's ability to develop the wind and

oil and gas resources. Of course, this should be expressly addressed in any lease.

3. Unilateral easement adjustments are the topic of **§4.8 Location, Relocation, and Dimensions of a Servitude.**

“Except where the location and dimensions are determined by the instrument or circumstances surrounding creation of a servitude, they are determined as follows:

(1) The owner of the servient estate has the right within a reasonable time to specify a location that is reasonably suited to carry out the purpose of the servitude.

(2) The dimensions are those reasonably necessary for enjoyment of the servitude.

(3) Unless expressly denied by the terms of an easement, as defined in § 1.2, the owner of the servient estate is entitled to make reasonable changes in the location or dimensions of an easement, **at the servient owner's expense**, to permit normal use or development of the servient estate, but only if the changes do not

(a) significantly lessen the utility of the easement,

(b) increase the burdens on the owner of the easement in its use and enjoyment, or

(c) frustrate the purpose for which the easement was created.”

#### **IV. CONCLUSIONS**

##### **A. Development Will Take Place**

1. In Kansas, oil and gas development will take place.
  - a. Fossil fuels, absent some major technological advancement, are here to stay for another 30 years, at least.

- b. Climate change will not significantly impact oil and gas development. It will make it more difficult, and more expensive, but it will not stop it.
2. The goal, therefore, is how best to deal with this reality.

## **B. Deal With the Impacts**

1. Anticipate problems. The scale of development will determine the degree to which problems can be addressed generically.
2. Difficult to deal with problems generically when development is so individualized and piecemeal.
3. The rule of capture will haunt future efforts to manage development in any sort of coordinated manner.
4. Regulatory improvements should focus on ways to allow geologists and engineers to most efficiently develop an oil and gas reservoir.
  - a. Facilitating coordinated reservoir development will maximize recovery of the resource, minimize surface use and environmental impacts, and reduce the capital investment required to extract the oil and gas. It will produce more, for less.
  - b. Facilitating coordinated reservoir development also provides a single entity that government can rely upon to implement programs such as road maintenance. It is difficult to blame it on competing developers when you are dealing with "the" developer.

## **C. Deal With the Money**

1. This is perhaps the most unsolvable issue because it requires Legislatures to refrain from using an accumulation of money in the state (or federal) treasury as an asset available for current budgetary needs.
2. Industry will, and should, be suspicious of any fund currently collected to deal with future problems.

- a. Plugging funds are a good example.
  - b. If they are not consistently and fully funded, when the time comes to apply the funds to the intended purpose, any short-fall will be the industry's problem, not the Legislature's – even though the industry may have paid in more than enough money through time to address the problems.
  - c. The reaction when the cash paid in by industry is not available to address a problem is quite predictable: (1) strained reading of existing statutes in an effort to impose liability on current industry participants; and (2) new laws to collect new funds.
3. When dealing with a depleting asset, which is by definition an *unsustainable* resource, the wealth generated today must be used, in part, to deal with the limited life cycle of the resource.