

EXHIBIT "A"
COMMENTS REGARDING PROPOSED REVISIONS TO 25 CFR 226
OSAGE NEGOTIATED RULEMAKING COMMITTEE
February 26, 2013

I. Introduction

While we appreciate the attention paid by the Rulemaking Committee to surface issues as part of the Rulemaking process, the proposed revisions to 25 CFR 226 (Proposed Revisions), which were just posted on Friday, are inadequate and fail to sufficiently protect public health, natural resources and property rights in Osage County. Moreover, any new regulations must be coupled with adequate resources for the recruitment and training of capable regulators to enforce these new regulations. Preferably, the BIA should utilize the BLM to conduct these functions as they capably do for other Federal lands.

BLM's own regulations were not adequate in keeping pace with advances in new oil and gas activity, new challenges on environmental protection and better ways to produce oil and gas while protecting the environment. As a result, the BLM made some substantial improvements by passing the Oil and Gas Onshore Orders (Orders). These Orders should be immediately incorporated into the Proposed Revisions as affirmatively applying to Osage County.

In reviewing the Proposed Revisions, the BIA substituted certain regulations from 43 CFR 3150 and 3160, which were inadequate and outdated, thus leading to the passage of the current 7 Orders. While the Proposed Revisions make an attempt to fix the problem, some are not up to current industry best practices. It was also surprising in this review that many relevant American Petroleum Institute standards and Recommended Practices (RPs) were not incorporated into the Proposed Revisions. Adopting these standards and RPs will be the most effective way to significantly and quickly improve oil and gas development practices in Osage County.

II. General Comments

The following are general comments regarding the Proposed Revisions. However, there are some issues which we believe need to be addressed that are not contained therein.

1. Roads - new activity to develop the Mississippi Lime play will bring larger rigs, many loads of equipment and trucks particularly associated with hydraulic fracturing of horizontal wells. This traffic is a major issue and causes a host of problems with which many states and public municipalities have had to grapple. The most logical way is to prepare. This requires initiating a fund to make repairs and to develop good engineering principals to mitigate as much of the problem up front. There are some models that states like Texas, Pennsylvania and Ohio have developed that the Rulemaking Committee (Committee) should consider.

2. Increased activity and more natural gas production create jobs and revenue for Osage County, but it also means there will be safety and health issues. The Orders (particularly Order # 6) address this; however, training for regulators, first responders and the public needs to be included and should be done at the expense of the companies who will be creating these potential problems.

3. Third-party testing of the air and water. There is no better way to determine environmental impact than by developing a baseline of the environment before drilling takes place. All permits should require third party testing of water wells within 2,000 feet of the permitted wellbore. Air quality after the well has been drilled and completed should also be third-party tested and made available to the public as part of a transparent regulatory process.

4. The public's concern with hydraulic fracturing can easily be address by requiring companies to post the composition of the fracturing fluids on a website called FracFocus. This was developed by the Ground Water Protection Council, the Interstate Oil and Gas Compact Commission and has been endorsed by all the national oil and gas associations. Most states now require this and it is being considered by the BLM. Language for this requirement is shown in the Appendix of these comments.

5. BIA needs to consult with US Fish and Wildlife Service and Oklahoma Department of Wildlife Conservation with respect to impacts on threatened, endangered and sensitive species including without limitation Bald and Golden Eagles, American burying beetles, and Greater Prairie Chickens.

III. **Specific Comments Re: the Proposed Revisions and Unchanged Sections (in sequential order)**

Definitions

226.1(o) The definition of "Avoidably lost" includes "venting" of produced gas. Venting of any gas containing 10 ppm or greater of hydrogen sulfide should be expressly prohibited.

Superintendent Responsibilities

226.1B(a) The BIA is "authorized to issue and make effective" onshore orders, including those of the BLM, but there is nothing mandating the application of these orders to Osage County. These orders must be affirmatively applied to govern oil and gas operations in Osage County. The language should be "The Bureau of Indian Affairs hereby adopts BLM Onshore Orders 1-7 for immediate application to all oil and gas development in Osage County, Oklahoma."

226.1B(b) The mandate to "require that all operations be conducted in [a] manner which protects other 'natural resources' and environmental quality" should be expanded to include explicit reference to air, land, water, and wildlife habitat. Also, all oil and gas activities should be conducted so as to not unduly interfere with the ongoing operations and private property rights of the surface owner.

226.1B(c) Annual inspections of non-compliant lease sites are wholly inadequate. Inspections of these sites should be done at least monthly until compliance is verified for a period of 1 year, and then should change to annual.

Sale of Leases

226.2(b) Within 10 days following full execution of the Lease, the surface landowner(s) affected by the Lease should be notified by the BIA that the minerals under their surface have been leased.

226.2(e) This states that, "No lease, assignment thereof, or interest therein will be approved to any employee or employees of the Government..." This prohibition needs to be expanded so that Osage Mineral Headrights can not be held by BIA Osage Agency employees who work in the land protection enforcement division, thus eliminating this conflict of interest where regulators of the Osage mineral estate are also personally benefiting from the mineral income.

Bonds

226.6(a) Language needs to be added here to clarify that the Bonding Amount must cover not just the cost to plug a single well but also to reclaim the well site and surrounding lands impacted thereby to the condition it was in prior to drilling and not released until reclamation has been properly completed.

226.6(c) The Bonding Amount should not be capped at 20 wells but should be calculated on all the wells.

Drilling and Production Obligations

226.9(a) This requires drilling to commence within 12 months of leasing or the mineral lease is terminated. However, such conditions appear to be variable with some of the recent large concessions granted in Osage County. Some concessions appear to still have a mandate of at least one well drilled per quarter section to hold the lease, while others do not have drilling requirements at that fine of a scale. These large concessions typically include expansive blocks of land that have not had a successful oil and gas producing history. Forcing drilling on every quarter section to hold the lease exposes the Lessee to excessive financial risk (dry holes), and causes excessive impacts to the land and wildlife. Leases should be structured to allow focused drilling, rather than a "shotgun" approach.

226.9(g) The first sentence should be revised to state "...for the protection of the air, land, water, natural resources and overall environmental quality of the leased land and lands directly adjacent thereto." Also, all oil and gas activities should be conducted so as to not unduly interfere with the ongoing operations and private property rights of the surface owner.

General Requirements re Operations

226.15A Fourth line should be revised as follows: "; which protects air, land, water, other natural resources and overall environmental quality of the leased land and lands directly adjacent thereto." Also, all oil and gas activities should be conducted so as to not unduly interfere with the ongoing operations and private property rights of the surface owner.

Information for Surface Owners

226.18

- This does not address landowner notification. The BLM Order 1 does an adequate job of addressing this key issue. (See Appendix language which also shows how both the State of Colorado and Utah have passed regulations, which provide proper landowner notification).
- Landowners must be notified prior to first entry onto the property by any lessee, regardless of the activity, so that prior to surveying and staking a well a producer shall notify the Landowner of producer's intentions and schedule a meeting to discuss same as well as all other issues. In all cases, such notification and meeting should be held at least 60 days prior to lessee's desired commencement of activities on the property.
- At this meeting, the lessee and landowner should begin discussion and negotiations of a written agreement governing all aspects of the proposed development, including without limitation the location and size of the well site, location and scope of access to and from same, location and nature of electric lines and flow lines, temporal, geographic and other restrictions on drilling, completion and operational activities to protect human health and safety and air, land, water, wildlife and other natural resources and overall environmental quality of the land, residential/agricultural/commercial disturbance, amount of Damages, insurance, liability and indemnification requirements, and any and all factors deemed important by the parties.
- In the event the parties can not agree on the terms of a written agreement within 60 days following the meeting, then each party shall have 10 days to appoint an arbitrator and the two arbitrators shall agreed upon a third Arbitrator. If a Third arbitrator cannot be agreed upon, then the parties shall appeal to the District Judge, who shall have 20 days to select the third Arbitrator. After the 3rd Arbitrator has been selected the arbitrators shall have 30 days to access value, location, size or any matters aggrieved upon and make a written agreement. It takes a minimum of 2 arbitrators to make a final decision. If in the event one party does not appoint arbitrator or does not abide by date limits, then District Judge shall also appoint such arbitrator.

Use of Surface

226.19(a)

- This language does not encourage using best practices to protect surface lands and water, namely, practices regarding pad drilling, the proper construction of access roads, adequate protection of water, and burial of electric lines. The BLM's Best Management Practices contain language which minimizes surface disturbance and encourages better protection of land and water.
- This provision should also reference that the use of the surface shall be governed by the written agreement to be executed by lessee and the landowner.
- Instead of the Superintendent being the decision maker re: routing of pipelines, electric lines, etc., this should be governed immediately by arbitration.
- The last sentence should be changed to "...., nor permit any avoidable nuisance, threats to public health or safety, or pollution of air, land, water, wildlife, other natural resources, or overall environmental quality of the land." Also, all oil and gas activities should be conducted so as to not unduly interfere with the ongoing operations and private property rights of the surface owner.

226.19(b)

- The amount for seismic exploration damages should be increased to no less than \$ 4,000 per mile for seismic line laid on the ground and \$10.00 per acre for 3D seismic.
- The commencement/damage payment for a well site is a significant improvement but the amount should be increased to no less than \$10,000 per acre, and shall be negotiated as part of the written agreement required pursuant to Section 226.18.
- Commencement/damage payments should also be made for redrilling of a well site that has previously been plugged, abandoned and reclaimed.
- As in most surface use requirements, the surface owners are compensated for roads, collection lines and electric transmission lines. These amounts should be no less than \$10,000 per acre equivalent for roads, flow lines, and power lines.
- The following requirements should be added to Section (b):
 - (1) When constructing the drill pad, Lessee shall first blade-off the topsoil, pushing it into a berm such that it shall be available for restoration of the site when the well is plugged. The size of the drill pad hosting at least 3 horizontal wells should be no greater than 3 acres and vertical wells no later than greater than 1.5 acres.
 - (2) Within 90 days of well completion, Lessee will (a) reduce the size of the well pad to as small of an area as is reasonably practicable for oil field operations, but in no event greater than .75 acres for

horizontal wells, and no greater than .3 acres for vertical wells, and (b) restore the original contour and soil profile (topsoil on top), and plant vegetation per the instructions of the Surface Owner.

- (3) BIA encourages drilling of multiple wells from one well pad site to reduce the amount of surface impact. In addition, reference should be made to the written agreement to be executed by the parties.

226.19(c) Schedule for tendering payment of commencement/damage payment should be governed by the written agreement between the lessee and landowner.

Damages Settlement

226.21 In the event the parties can not agree on damages pursuant to the written agreement, then each party shall have 10 days to appoint an arbitrator and the two arbitrators shall agreed upon a third Arbitrator. If a Third arbitrator cannot be agreed upon, then the parties shall appeal to the District Judge, who shall have 20 days to select the third Arbitrator. (After the 3rd Arbitrator has been selected the arbitrators shall have 30 days to access value, location, size or any matters aggrieved upon and make a written agreement. It takes a minimum of 2 arbitrators to make a final decision. If in the event one party does not appoint arbitrator or does not abide by date limits, then District Judge shall also appoint such arbitrator.

Prohibition of Pollution

226.22(a)

- Insert "...that will prevent pollution of air, land, and water and the migration of" as well as "damage to wildlife habitat, other natural resources and overall environmental quality" at the end of sentence.
- Recommend inserting "when Oil Based Drilling Fluid is being used, the operator shall use a closed loop fluid system and all associated waste will be properly disposed by recycling or injection."
- Also insert: "all flow back fluids used in hydraulic fracturing will be either recycled or disposed of by injection."
- All pits, regardless of use, should be lined with 30 ml plastic, unless otherwise approved by surface owner.

226.22(e) Modify to include tank batteries in the requirement that pits be lined with at least 30 mil plastic.

Environmental Obligations

226.22A(a) In the second sentence, add reference to BLM Onshore Orders 1-7 with which lessees must comply.

226.22A(b)

- In first sentence add reference to "air, land, water, wildlife habitat, other natural resources and overall environmental quality as well as use of private property."
- In the last sentence, add reference to the written agreement between the parties and the surface owner as governing reclamation.

226.22A(d) Delete the word "reasonably" as it is not reasonable not to require this. It should always be required.

Safety

226.22B There should be explicit reference to Onshore Order 6 re: H2S gas.

Easements

226.23 Insert "and Surface Owners," behind Mineral Council in the first sentence.

Lessee's Use of Water

226.24

- "Lessee or his contractor may, with the approval of the Superintendent, use water from streams and natural water courses Lessee or his contractor may use water from reservoirs" The Superintendent does not have any authority to allow oil companies to take water from surface streams or reservoirs. Surface water is publicly owned by the State of Oklahoma and groundwater is private property belonging to the

overlying surface owner. Water permits for surface and groundwater are issued and regulated by the Oklahoma Water Resources Board (OWRB). Oil companies must file for a permit with the OWRB before any water may be taken from a surface or groundwater source. *Osage Nation v. Irby* (597 F. 3d 1117 - Court of Appeals, 10th Circuit 2010) made it clear that Osage County is not an Indian reservation and Oklahoma law and property rights apply in Osage County, including water law. Scarce water resources must be protected during this historic drought, and the BIA does not have the expertise or authority to regulate or permit surface or groundwater in Osage County.

- This section is a major issue which was not changed. It is almost incomprehensible the landowner and the beneficiaries to the water are not consulted and required to provide approval.
- Reduction, reuse and recycling of produced water and hydraulic fracturing water must be done first before fresh water sources can be tapped, and then only following consultation and approval of "the surface owner and affected parties" This issue will become more evident when large volumes of water are used for drilling deeper wells and large hydraulic fracturing activities. This change will also encourage operators to recycle, re-use and conserve precious water resources in Osage County.

Disposition of Casings, Improvements

226.29

- Osage County is littered with abandoned oil field equipment, pools of oil and saltwater on the surface. The Rulemaking Committee did not make any substantive changes to this section and there is no reason to believe the problem will cease until you include language that identifies there will be better oversight, quality assurance the wells were properly plugged and the sites restored.
- The default should be that permanent improvements, along with personal property, should be removed from the property unless otherwise provided by the written agreement between the lessee and landowner.
- This section should be modified to include the requirement that within 90 days of well plugging, in addition to removal of all permanent improvements and personal property, Lessee will remediate the well site by restoring the original soil contour and soil profile (topsoil on top), and plant vegetation per the instructions of the Surface Owner.

Well Records

226.32

- Section (a) should be modified to mandate Lessees also report all freshwater well drilling data to the BIA and Oklahoma Water Resources Board. Freshwater wells are often drilled in conjunction with horizontal wells, but they are apparently not being logged and reported. This information would be very valuable in addressing the freshwater aquifer data needs discussed below in Section 226.35.
- Well Records and water well testing should be done within 2,000' of each oil or gas wellbore.

Line Drilling

226.33

The distances from the boundary line of leased lands should be increased to 600 ft.

Formations Protected

226.35

- It is not in 25 CFR 226, but BIA staff state that their current standards call for setting of well surface casing to a depth of 50ft below the deepest freshwater aquifer to protect freshwater resources. However, the freshwater aquifer data/maps that BIA is using are outdated and inaccurate. An example is in the NE/4, Section 7, T26N, R9E, where RAM/Halcon plans to drill two horizontal wells. BIA data says the deepest freshwater for that location is 155ft, but active residential wells of 250ft and 290ft are located ¼ mile to the east. BIA's freshwater aquifer data/maps need immediate updating and ground-truthing with known freshwater well data. Until that update is complete, surface casing should be required to a depth of 200ft below that recommended by BIA's outdated data/maps to insure freshwater protection (same as Title 800:30-3-2(12)(C)(i), which governs mineral development on state-owned lands).
- Lessee should also be required to conduct third party before-and-after water quality tests on all freshwater wells in quarter sections adjacent to well drilling locations or within not less than 2,000 feet of wellbores, with results reported to BIA and Surface Owners.
- This section is not adequate and the BIA should include the language from BLM Order # 1 in its place. (See comments on 226.36 (e) below).

Control of Wells

226.36

- This section is woefully inadequate, and the requirements are not even based on current industry best practices or API specifications. The BIA should substitute BLM Order # 2, which does a much better job of well control in place of this section.
- Hydrogen sulfide gas (H₂S) is a deadly component often at highly toxic levels in the abundant yields of natural gas often associated with the new horizontal wells being drilled in the Osage. Flaring (open burning) is used to eliminate H₂S, but byproducts of this combustion (sulfur dioxide, etc.) also pose significant health risks to humans, livestock, wildlife, and soil chemistry (acidification). This Section should be modified to prohibit general open flaring of natural gas with levels of H₂S in excess of 10 ppm. If short-term flaring must be allowed (well drilling/completion, no available pipeline, emergencies), then Lessee must use the best current flaring technology for the oil and gas industry. Current best industry standards for flare technology follow API guidelines and utilize a "clean-burn variable tip flare."

226.36(e) The proposed language makes an attempt of addressing the issue on protecting water, but is not prescriptive on how; for example, there need to be requirements that new casing be cemented to surface and assurance be provided that the cement job was done properly. API have excellent RPs which should be included and are followed by all prudent operators today.

Site Security

226.40A We commend the insertion of this section is a major improvement. Surface landowners should be also consulted and the proposed security plan should be included in a surface use agreement.

Accidents

226.41 There is no provision for reporting environmental accidents, i.e. salt water spill, oil spills, H₂S leaks, etc., or killing of livestock. These need to be added.

Penalties for Lease Violations

226.42 This section is a significant improvement, however the threat of the penalties in the past have not deterred poor practices so we recommend the enforcement of these rules must be enhanced.

Penalties for Regulation Violations

226.43. Need to add penalties for failure to avoid pollution to air, land, water, wildlife habitat, other natural resources and overall environmental quality, and such penalty should be \$1,000 per day.

APPENDIX

The Environmentally Friendly Drilling Program supports a website developed by the Colorado School of Law <http://www.oilandgasbmps.org/>. This includes links to the Rocky Mountain region Federal and State oil and gas regulatory bodies. It is a good way for the BIA committee to compare these various regulations.

The State of Ohio has done a very good job of developing new regulations. Ohio is one of the oldest producing states in the US. An emerging new play called the Utica caused them to address many of the problems other regions were dealing with up-front. They adapted the "best of" other regulatory framework other regulatory models for their region and needs. The Environmental Defense Fund, API, STRONGER and BLM all played a part. This is a good example for how Osage could do.

BLM Policies and Guidance

43 C.F.R. § 3104.1 - Bond Obligations - Required bonding for oil and gas lease operations in order to ensure that the operator performs all obligations of the lease contract, including but not limited to surface reclamation and cleanup of abandoned operations. Minimum amount - \$10,000.

43 C.F.R. § 3104.5 - Increased Amount of Bond - Authorizes the supervising BLM officer to increase the amount of a bond applying to certain operators who represent a high risk based on various factors including, a history of previous violations, royalties due, or revised reclamation cost estimates.

The BLM continues to improve the way it manages oil and gas development on the public lands. BLM issued a Best Management Practice (BMP) policy on June 22, 2004. The policy instructs field offices to incorporate appropriate BMPs into Applications for Permit to Drill and associated on- and off-lease rights-of-way approvals. By reducing the area of disturbance, adjusting the location of facilities, and using numerous other techniques to minimize environmental effects, BLM is significantly reducing impacts associated with new energy development to wildlife habitat, scenic quality, water quality, recreation opportunities, and other resources.

http://www.blm.gov/wo/st/en/prog/energy/oil_and_gas/best_management_practices.html%20

Modifications to regulations 25 CFR Part 226 should incorporate the use of these BMPs and especially include the Oil and Gas Orders; the authority is referenced in the 43 CFR 3164.1. They can be found on the BLM website and the Federal Register.

Order # 1 BLM ONSHORE OIL AND GAS Federal Register Vol. 72 # 4 March 7, 2007

F. Surface Use

Onshore Oil and Gas Order No. 1 specifically addresses surface use. That Order provides for safe operations, adequate protection of surface resources and uses, and other environmental components. The operator/lessee is responsible for, and liable for, all building, construction, and operating activities and subcontracting activities conducted in association with the APD. Requirements and special stipulations for surface use are contained in or attached to the approved APD.

Minimum Standards and Enforcement Provisions for Surface Use.

The requirements and stipulations of approval shall be strictly adhered to by the operator/lessee and any contractors. Violation: If a violation is identified by the authorized officer he shall determine whether it is major or minor, considering the definitions in 43 CFR 3160.0-5, and shall specify the appropriate corrective action and abatement period.

Order # 2 (which excluded Osage) Standards for Well Control FR 52 #223

Note section III Well Control Equipment and section B Casing and Cementing which needs to be included in the proposed Osage regulations.

Onshore Oil and Gas Order No. 3, Site Security

Some of the language from this section was included in the proposed regulations. This section should be incorporated in the new regulations.

Onshore Oil and Gas Operations; Federal and Indian Oil and Gas Leases; Onshore Oil and Gas Order No. 6, Hydrogen Sulfide Operations BLM 43 CFR 3160 FR 55 # 226

The purpose of this Order is to protect the public health and safety and those personnel essential to maintaining control of the well. This Order identifies the Bureau of Land Management's uniform national requirements and minimum standards of performance expected from operators when conducting operations involving oil or gas that is known or could reasonably be expected to contain hydrogen sulfide (H₂S) or which results in the emission of sulfur dioxide (SO₂) as a result of flaring H₂S. This Order also identifies the gravity of violations, probable corrective action(s), and normal abatement periods.

Onshore Oil and Gas Order No. 7, Disposal of Produced Water

This Order supersedes Notice to Lessees and Operators of Indian and Indian Oil and Gas Leases (NTL--2B), Disposal of Produced Water. The purpose of this Order is to specify informational and procedural requirements for submitted of an application for the disposal of produced water, and the design, construction and maintenance requirements for pits as well as the minimum standards necessary to satisfy the requirements and procedures for seeking a variance from the minimum standards. Also set forth in this Order are specific acts of noncompliance, corrective actions required and the abatement period allowed for correction.

In addition to the BLM regulations and Orders the BIA should also consider some relevant State Regulations:

Relevant provisions of the Colorado Oil and Gas Conservation Act include:

§ 34-60-127 – Reasonable Accommodation – The "Reasonable Accommodation" provision of the Oil and Gas Conservation Act requires that oil and gas operations be conducted in a manner that accommodates surface owners and minimizes intrusion upon and damage to surface lands. This can be achieved by selecting alternative locations for wells, roads, pipelines, and production facilities, or employing alternative means of operations, where such alternatives are technologically sound, economically practicable, and reasonably available to the operator.

Operators shall provide financial assurance to the commission, prior to commencing any operations with heavy equipment, to protect surface owners who are not parties to a lease, surface use or other relevant agreement with the operator from unreasonable crop loss or land damage caused by such operations. The determination that crop loss or land damage is unreasonable shall be made by the Commission after the affected surface owner has filed an application in accordance with the 500 Series rules. Financial assurance for the purpose of surface owner protection shall not be required for operations conducted on state lands when a bond has been filed with the State Board of Land Commissioners.

The financial assurance required by this section shall be in the amount of two thousand dollars (\$2,000) per well for non-irrigated land, or five thousand dollars (\$5,000) per well for irrigated land. In lieu of such individual amounts, operators may submit statewide, blanket financial assurance in the amount of twenty five thousand dollars (\$25,000). Relief granted by the Commission upon application by a surface owner pursuant to this section may include an order requiring the operator to conduct corrective or remedial action, and any monetary award for unreasonable crop loss or land damage that cannot be remediated or corrected is not limited to the amount of the operator's financial

assurance hereunder

§ 34-60-124 – Oil and Gas Conservation and Environmental Response Fund – The Oil and Gas Conservation Act created the Conservation and Environmental Response Fund to "investigate, prevent, monitor, or mitigate conditions that threaten to cause, or that actually cause, a significant environmental impact on any air, water, soil, or biological resource; to gather background or baseline data on any air, water, soil, or biological resource that the commission determines may be so impacted by the conduct of oil and gas operations; and to investigate alleged violations...that threaten to cause or actually cause a significant adverse environmental impact."

§ 34-60-128 –Colorado Habitat Stewardship Act of 2007– The Habitat Stewardship Act was enacted "to minimize adverse impacts to wildlife resources affected by oil and gas operations." The Act requires oil and gas operators to complete timely consultations with the wildlife commission, the division of wildlife, and affected surface owners prior to beginning operations, and it requires the implementation, "whenever reasonably practicable," of "best management practices and other reasonable measures to conserve wildlife resources."

Further, the **Habitat Stewardship Act** charges the COGCC to promulgate rules by July 1, 2008 to establish standards for minimizing adverse impacts to wildlife resources and to ensure proper reclamation of habitats during and following oil and gas operations. The Act requires the rules, at a minimum, to address:

- developing a timely and efficient consultation process with the division of wildlife governing notification and decision making for minimizing adverse impacts and other issues related to wildlife
- encouraging operators to utilize comprehensive drilling plans and geographic area analysis strategies to provide for orderly development of oil and gas fields
- minimizing surface disturbance and fragmentation in important wildlife habitat areas by incorporating appropriate best management practices

Wildlife protection provisions can also be found in **§ 33-1-101** which declares:

"It is the policy of the state of Colorado that wildlife and their environment are to be protected, preserved, enhanced, and managed for the use, benefit, and enjoyment of the people of [Colorado] and its visitors..."

Hydraulic Fracturing: Requires the operator of the well must complete the chemical disclosure registry form and post the form on the chemical disclosure registry. This registration is through FracFocus website.

Insurance All operators shall maintain general liability insurance coverage for property damage and bodily injury to third parties in the minimum amount of one million dollars (\$1,000,000) per occurrence. Such policies shall include the Commission as a "certificate holder" so that the Commission may receive advance notice of cancellation.

Relevant regulations from Utah Rule R649-3. Drilling and Operating Practices which also address surface rights protection:

As in effect on February 1, 2013

1. These rules and all subsequent revisions as approved by the board are developed pursuant to the requirements of the Surface Owner Protection Act of 2012 in Title 40, Chapter 6. It is the intent of the board and the division to encourage owners or operators and surface land owners to enter into surface use agreements. Surface use agreements should fairly consider the respective rights of the owner or operator and the surface land owner and also comply with the requirements of R649-3-34.

2. Definitions

3. Oil and gas operations shall be conducted in such manner as to prevent unreasonable loss of a surface land owner's crops on surface land, unreasonable loss of value of existing improvements owned by a surface land owner on surface land, and unreasonable permanent damage to surface land.

4. In accordance with Section 40-6-20, an owner or operator may enter onto surface land under which the owner or operator holds rights to conduct oil and gas operations and use the surface land to the extent reasonably necessary to conduct oil and gas operations and consistent with allowing the surface land owner the greatest possible use of the surface land owner's property, to the extent that the surface land owner's use does not interfere with the owner's or operator's oil and gas operations.

4.1. Except as is reasonably necessary to conduct oil and gas operations, an owner or operator shall mitigate the effects of accessing the surface land owner's surface land, minimize interference with the surface land owner's use of the surface land owner's property, and compensate a surface land owner for unreasonable loss of a surface land owner's crops on the surface land, unreasonable loss of value to existing improvements owned by a surface land owner on the surface land, and unreasonable permanent damage to the surface land.

4.2. An owner or operator may but is not required to obtain location or spacing exceptions from the division or board or utilize directional or horizontal drilling techniques that are not technologically feasible, economically practicable, or reasonably available.

5. In accordance with Section 40-6-21, non-binding mediation may be requested by a surface land owner and an owner or operator, by providing written notice to the other party, if they are unable to agree on the amount of damages for unreasonable crop loss on the surface land; unreasonable loss of value to existing improvements owned by the surface land owner on the surface land, or unreasonable permanent damage to the surface land.

5.1. A mediator may be mutually selected by a surface land owner and an owner or operator from a listing of qualified mediators maintained by the division and the Utah Department of Agriculture and Food, which includes the mediators identified on the Utah State Courts website with "property" or "real estate" as an area of expertise, or a mediator may be selected from any other source.

5.2. The surface land owner and the owner or operator shall equally share the cost of the mediator's services.

5.3. The mediation provisions of this subsection do not prevent or delay an owner or operator from conducting oil and gas operations in accordance with applicable law.

6. A surface use bond shall be furnished to the division by the owner or operator, in accordance with the following provisions of Subsection R649-3-38-6.

6.1. A surface use bond does not apply to surface land where the surface land owner is a party to, or a successor of a party to:

6.1.1. A lease of the underlying privately owned oil and gas;

6.1.2. A surface use agreement applicable to the surface land owner's surface land; or

6.1.3. A contract, waiver, or release addressing an owner's or operator's use of the surface land owner's surface land.

6.2. The surface use bond shall be in the amount of \$6,000 per well site and shall be conditioned upon the performance by the owner or operator of the duty to protect a surface land owner against unreasonable loss of crops on surface land, unreasonable loss of value of existing improvements, and unreasonable permanent damage to surface land.

6.3. The surface use bond shall be furnished to the division on Form 4S after good faith negotiation and prior to the approval of the application for permit to drill. The mediation process identified in R649-3-38-5 may commence and is encouraged to be completed.

6.4. The division may accept a surface use bond in the form of a cash account as provided in R649-3-1-10.2.1 or a certificate of deposit as provided in R649-3-1-10.2.3. Interest will remain within the account.

6.5. The division may allow the owner or operator, or a subsequent owner or operator, to replace an existing surface use bond with another bond that provides sufficient coverage.

6.6. The surface use bond shall remain in effect by the operator until released by the division.

6.7. The surface use bond shall be payable to the division for the use and benefit of the surface land owner, subject to the provisions of these rules.

6.8. The surface use bond shall be released to the owner or operator after the division receives sufficient information that:

6.8.1. A surface use agreement or other contractual agreement has been reached;

6.8.2. Final resolution of the judicial appeal process for an action for unreasonable damages, as defined in R649-3-38-6.2, has occurred and have been paid; or

6.8.3. Plugging and abandonment of the well is completed.

6.9. The division shall make a reasonable effort to contact the surface land owner prior to the division's release of the surface use bond.

Chemical disclosure for hydraulic fracturing.

1.1. The amount and type of chemicals used in a hydraulic fracturing operation shall be reported to www.fracfocus.org within 60 days of hydraulic fracturing completion for public disclosure.