October 25, 2013

VIA EMAIL (osageregneg@bia.gov)
Mr. Eddie Streater
Designated Federal Officer,
Bureau of Indian Affairs
P.O. Box 8002
Muscogee, OK 74402

RE: Comments on Draft Rule Governing Leasing of Osage Nation Mineral Rights for Oil and Gas Development; ID # 1076–AF17

Dear Mr. Streater:

On behalf of the Osage County Cattlemen's Association ("OCCA"), the purpose of this letter is to respond to the publication in the Federal Register of the proposed revision of the regulations governing oil and gas leasing and development in Osage County, Oklahoma ("Draft Revision").

As you know, the OCCA has been closely following the process that preceded the publication of the Draft Revision, most notably the proceedings of the Negotiated Rulemaking Committee ("Negotiated Rulemaking") based in Osage County that held hearings and generated a proposed draft back in April. The OCCA submitted formal, detailed comments to the Rulemaking Committee, outlining what it believed were severe deficiencies in the Rulemaking Committee's draft with respect to protections for public health, safety, the environment and property rights. After the Rulemaking Committee voted out its final draft and delivered it to the Department of Interior ("DOI"), it was the OCCA's hope that the deficiencies would be rectified prior to formal publication. Unfortunately, the Draft Revision failed to correct any of the deficiencies.

The OCCA believes that the primary reason for the deficiencies of the Draft Revision with respect to land and environmental protection was the failure of the Rulemaking process to be thorough and inclusive. Specifically, the process was rushed and conducted without any formal involvement of the landowners the Draft Revision is supposed to protect, nor were state agencies or industry experts familiar with state of the art regulations and practices widely used elsewhere consulted. Accordingly, the OCCA has called on DOI to rescind the Draft Revision and re-start the Rulemaking Process to properly and officially include landowners who have suffered health problems, pollution or air, water and land, and loss of property due to oil and gas development (see joint letter to Assistant Secretary of Interior, Kevin Washburn, dated September 12, 2013, attached hereto as Exhibit "A"). The OCCA herein reiterates that request.

In addition, the OCCA strongly recommends that as part of the reconstituted rulemaking process DOI should engage STRONGER (State Review of Oil and Natural Gas Environmental Regulations, Inc.) to conduct a comprehensive outside review and audit of the Osage Oil and Gas Rules and the Bureau of Indian Affairs' ("BIA")

enforcement of same.[1] Such an audit will form the proper technical baseline and groundwork upon which to build a comprehensive rule that will meet the needs of all stakeholders involved, including the landowners the OCCA represents.

In the event that DOI declines to rescind the Draft Revision, reconstitute the Rulemaking Committee, and/or engage STRONGER to do a review, the OCCA wishes to formally present its comments on the Draft Revision, which are attached hereto as Exhibit "B". As you will see, for each relevant section, we have stated a comment and proposed alternative language. Overall, the Draft Revision is grossly inadequate and fails to sufficiently protect public health, natural resources and property rights in Osage County. Moreover, it does not go nearly far enough in adopting some of the best management practices being used by the industry today nor does it change some of the more egregious provisions of the existing regulations.

In addition to the critical need to overhaul and update the rules governing oil and gas development in Osage County, we want to reiterate to DOI that it is also critically important that enforcement of these rules be significantly upgraded. Currently, BIA simply lacks the quantity and quality of personnel capable of effectively and efficiently overseeing oil and gas production and protecting the interests of landowners and the environment. We repeat our recommendation that DOI enter into an arrangement with the State of Oklahoma to delegate this power to the State, which has the engineers, geologists and technical experts that BIA currently lacks.

We strongly urge the DOI to seriously consider our comments and adopt our recommended alternative language for the Draft Revision as well as our recommendations for improving enforcement, all of which will be a major step in helping transform oil and gas regulation and development in Osage County from worst to one of the best in North America.

Thank you for your consideration of the OCCA's recommendations and comments contained herein.

Sincerely,

Jeff Henry
President
Osage County Cattlemen's Association

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[1] STRONGER is a non-profit consortium of industry experts, government officials, and environmental organizations that has audited all of the major state agencies with the biggest oil and gas programs in the U.S., including Oklahoma, Colorado, Pennsylvania, Texas and Ohio. For a recent example of STONGER's work, see 2013 audit of Pennsylvania at http://strongerinc.org/sites/all/themes/stronger02/downloads/Final%20Report%20of%20Pennsylvania%20State%20Review%20Approved%20for%20Publication.pdf.

Exhibit "A"

Group Letter to Assistant Secretary Washburn Requesting Re-Start of Rulemaking Process

September 12, 2013

The Honorable Kevin Washburn
Assistant Secretary Bureau of Indian Affairs
1849 C Street, N.W.
Washington, D.C. 20240

Dear Assistant Secretary Washburn:

Members from the Osage Producers Association (OPA), Osage County Cattlemen's Association (OCCA) and Osage Minerals Council (OMC) have met with you and your associates concerning the final draft revision of the federal regulations governing oil and gas development in Osage County (Draft Rules), which Draft Rules were approved by the Osage Negotiated Rulemaking (Reg Neg) Committee on April 2, 2013 and just published in the Federal Register on August 28, 2013 for public comment. Collectively, we are in agreement that the Osage Reg Neg process was flawed because parties that could be significantly affected by and with the most at stake from the Draft Rules were not adequately represented; specifically, oil and gas producers, a majority of Osage shareholders, oil and gas marketers and non-operators whose economic livelihoods in Osage county are directly dependent on oil and gas drilling and production activity, along with landowners who have suffered from impacts to their health, livestock and property rights, were not included in the Reg Neg Committee, and their concerns about the Draft Rules were largely ignored.

We respectfully request that the Osage Reg Neg process be re-started and include full representation of all stakeholders and the time limits referred to in the original Reg Neg Charter be honored. Specifically, we request that up to 25 members with representation of all the aforementioned stakeholders be included on the Committee and the full two-year time frame for the Committee's work be allowed, as stated in the Federal Register, dated June 18, 2012.

Thank you for any attention you may give to this request.

Sincerely,

Rob Lyon, President OPA

Jeff Henry, President OCCA

Cynthia Boone, OMC Member

Melvin Core, OMC Member

Unavailable
Dudley Whitehorn, OMC Member

Myron Redeagle, OMC Member

Curtis Bear, OMC Member

cc: Senator Mark Udall
Senator James M. Inhofe
Congressman Jim Bridenstine
Congressman Tom Cole
Honorable Sally Jewell, Secretary
Department of Interior
Senator Tom Coburn, M.D.
Congressman Frank D. Lucas
Congressman Markwayne Mullin
Congressman James Lankford

Exhibit "B"

OCCA's Comments re: Draft Rule Revising Section 226 of Title 25 of the Code of Federal Regulations Governing Oil and Gas Development in Osage County, Oklahoma

Title of Rule:

Comment: The title of the rule is outdated and incorrect. The Osage "Reservation" has been disestablished and no longer exists, and it is the Osage Nation's mineral rights, not lands, that are being developed for oil and gas drilling, not mining.

Alt. Language: The title of the rule should be "Leasing of Osage Nation Mineral Rights for Oil and Gas Development."

226.1 Definitions.

Comment: "Surface owner" should be a defined term in the regulations given the extent to which Surface owners are impacted by oil and gas development.

Add?

Alt. Language (to be added in the definitions list): "Surface owner" means any person, firm, corporation or other entity that owns the surface of the land on which oil and gas development is proposed or occurs.

226.3: Onshore Orders.

Comment: There are two issues with this section. First, the BIA's power to issue and make effective onshore orders and Notices to Lessees (NTL) is discretionary. Given the fact the BIA's regulations are inadequate, the BLM's onshore orders 1-7 should be expressly adopted now, and the BIA should be required to adopt future BLM onshore orders as they become issued. Second, it requires consultation with the Osage Minerals Council. The OMC lacks the technical expertise to opine on whether onshore orders or NTLs should be issued or adopted. It is neither wise nor appropriate for the OMC to be involved in this process.

Alt. Language: "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, and the BIA shall adopt all future BLM onshore orders for application in Osage County."

Require Exec. consultation without comment period can't require

226.4(a)(10): Superintendent's Responsibilities.

Comment: The Superintendent's responsibilities with respect to protection of the environment, public health and safety need to be expanded and strengthened.

Alt. Language: "Require that all operations be conducted in a manner which (i) protects public health and safety, (ii) safeguards air, land, surface and ground water resources and wildlife habitat, and (iii) does not unduly interfere with the ongoing operations and private property rights of the Surface owner."

226.4(c): Inspections.

Comment: Annual inspections of non-compliant lease sites are wholly inadequate. Inspections of these sites should be done at least quarterly until compliance is verified for a period of 1 year, and then should change to annual. All other lease sites, including both "active" and "temporarily abandoned" wells, should be inspected at least annually.[1]

Alt. Language: "The Superintendent shall establish procedures to ensure that each lease site which is noncompliant with applicable provisions of law or regulations, lease terms, orders or directives shall be inspected at least quarterly until compliance is verified for a period of one year, and then shall be inspected annually thereafter. The BIA shall deliver copies of the inspection reports for all non-compliant activities to the Surface owners until the violation has been corrected. All other lease sites, including both "active" and "temporarily abandoned" production and injection wells, shall be inspected at least annually."

Add New 226.4(d): Personnel.

Comment: To avoid conflicts of interest, Osage mineral headright owners should be prohibited from working in the lease inspection division of BIA. Headright owners have a financial interest in production being maximized and thus may be unable to fully perform their duties if it is necessary to reduce such production for the protection of the environment and interests of the Surface owner. BIA should follow the model of the Interior Department's reorganization of the former Minerals Management Service in the aftermath of the BP Gulf disaster, when the royalty collection and lease inspection divisions were separated. Landowners should not have to suffer a BP-style disaster before this necessary reform is accomplished.

Prop. Language: "The Superintendent shall adopt rules prohibiting Osage mineral headright owners from working in the lease inspection division of BIA."

226.5(c): Legal Description of Lease.

Comment: The Surface owner must also be notified following approval of a lease of minerals.

Alt. Language: "Within 30 days following approval of a lease, the Superintendent shall (i) post at the Agency, a legal description of the Mineral Estate that was leased and (ii)

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[1] State of Pennsylvania performs quarterly monitoring of non-compliant sites and annual monitoring of all others; see STRONGER Report on PA for more details.

mail to the Surface owner a certified letter informing the Surface owner that the minerals beneath his land have been leased."

226.5(d): Environmental Impact Assessments.

Comment: It is unclear whether environmental assessments that reveal significant environmental impacts preclude the issuance of leases, which should be the case. Also, it should be clear that the environmental assessments include the full range of potential impacts to air, land, water, and wildlife and consultations with other agencies with jurisdiction (i.e., U.S. Fish and Wildlife Service with respect to the federally endangered American Burying Beetle, which is found in Osage County and which has been killed due to oil and gas operations.

Alt. Language (New Sentence at end): "If significant environmental impact is found by the environmental assessment, then the Superintendent shall not grant his approval of the lease or associated activity."

226.6(a): Surrender of Leases.

Comment: If a lease is surrendered pursuant to this provision, it must be clear that the Lessee is still liable for all plugging, abandonment and reclamation obligations associated with the lease area, and that the Lessee is still subject to the terms and conditions of the Surface Use Agreement governing plugging, abandonment and reclamation.

Alt. Language: "The Lessee may, with the approval of the Superintendent and payment of a $75 filing fee, surrender all or any portion of any lease, have the lease cancelled as to the portion surrendered and be relieved from all subsequent obligations and liabilities, except for those obligations and liabilities (i) related to plugging and abandonment of wells and reclamation of well sites and other areas of the lease impacted by development and/or (ii) contained in the Surface Use Agreement with the Surface Owner, which shall survive any surrender of a lease."

226.9(a): Reclamation Bonds.

Comment: There are a number of issues here. First, 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 they were in prior to drilling. Second, the Bonding Amounts should be higher to reflect the real costs of reclamation today. Third, there should be differentiation between shallow wells, which are less expensive to drill and have a smaller footprint, and deeper vertical and/or horizontal wells, which have a much greater physical impact.

Alt. Language: "The per well "Bonding Amount" shall be defined as an amount sufficient to cover 125% of the cost of (i) plugging a single well and (ii) reclaiming the well site and surrounding land impacted thereby to the condition existing prior to drilling, which amount shall be set by the Superintendent but in any case shall be not less than (x) $5,000 for shallow wells less than 3,000 feet deep and (y) $10,000 for all wells drilled deeper than 3,000 feet and all horizontal wells."

226.9(c): Caps on Bonding Amount.

Comment: Capping the Bonding Amount is not appropriate. In the event of large leases where potentially hundreds of wells may be drilled by a single operator, capping the bonding could unfairly leave Surface owners and the public with the bill for reclaiming wells and lands. Lessees should be required to bear the full burden and cost of reclaiming and restoring the lands impacted by their operations.

Alt. Language: The language "up to a maximum of 25 wells" should be deleted.

226.14(a): Drilling Commencement.

Comment: 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. See Section 226.33 for suggested language.

226.14(g): Drilling Rate and Schedule Modification.

Comment: The factors governing when restrictions can be imposed need to be expanded.

Alt. Language: "The Superintendent may impose restrictions as to time of drilling and rate of production from any well or wells when in his judgment, such action may be necessary or proper for the protection of the (i) air, land, surface and ground water, natural resources and overall environmental quality of the leased land and lands directly adjacent thereto, (ii) public health and safety, and (iii) the interests of the Osage Tribe. All oil and gas activities shall be conducted so as to not unduly interfere with the ongoing operations and private property rights of the Surface owner, pursuant to restrictions included in the Surface Use Agreement defined below. The Superintendent may consider, among other things, incorporating Federal and Oklahoma rules regulating drilling or production."

226.33(a)(2), (3) and (5): General Requirements re Operations.

Comment: The limits on operations cited here should be expanded.

Alt. Language: (a)(2): "Protects air, land, surface and ground water, and other natural resources and overall environmental quality of the leased land and lands directly adjacent thereto;"

(a)(3): "Protects public health, safety, property and wildlife, and does not unduly interfere with the ongoing operations and private property rights of the Surface owner."

New (a)(5): "Encourages development of multi-well pads and horizontal drilling, which will cause less surface damage, reduce traffic and dust, and generally are more productive."

226.34(a): Notification of Seismic Exploration.

Comment: No geophysical or geologic exploration should be allowed prior to Lessee entering into a written agreement with Surface owner re: all seismic activities.

Alt. Language: (to be added at end of section) "At least 60 days prior to entering the land to conduct any seismic activities, Lessee shall negotiate and enter into a written agreement with the Surface owner regarding the terms and conditions of such activities. Should the parties fail to reach such an agreement, then the parties shall have the right to pursue arbitration to resolve such dispute pursuant to the process detailed at Section 226.36(b)."

226.36(a): Notifications of Surveys and Staking of Wells.

Comment: No survey or staking activities should be allowed prior to Lessee entering into written agreement with Surface owner re: such activities.

Alt Language: "At least 60 days prior to entering the land to conduct any survey or well-staking activities, Lessee shall negotiate and enter into a written agreement with the Surface owner regarding the terms and conditions of such activities. Should the parties fail to reach such an agreement, then the parties shall have the right to pursue arbitration to resolve such dispute pursuant to the process detailed at Section 226.36(b)."

226.36(b): Initial Lessee and Surface owner Meeting.

Comment: Lessees must meet with Surface owners at least 60 days prior to desired commencement of drilling activities. At this meeting, the Lessee and Surface owner should begin discussion and negotiations of a written agreement governing all aspects of the proposed development, including without limitation 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 the parties would be subject to arbitration.

Alt. Language for 226.36(b)(1) and (2): "No operations of any kind shall commence until the Lessee or his/her authorized representative shall meet with the Surface owner or his/her representative, if a resident of and present in Osage County, Oklahoma. Unless otherwise agreed to between the Lessee and Surface owner, such meeting shall be held at least 60 days prior to the commencement of any operations. At such meeting Lessee, or his/her authorized representative, and the Surface owner, or his/her authorized representative, shall negotiate a written agreement governing all aspects of the proposed development (Surface Use Agreement), including without limitation:

(1) The location and size of the well site(s);
(2) The location and scope of access to and from the well site(s);
(3) The location, nature, and maintenance of any (i) roads, fences and gates, (ii) pipelines, electric lines, pull rods, and flow lines (all of which shall be buried no less than three (3) feet below the surface of the land), and (iii) tank batteries, compressor stations and other appliances necessary for operations and marketing;
(4) Any temporal, geographic or other restrictions on drilling, completion and operational activities to protect (i) human health and safety, (ii) air, land, surface and ground water, wildlife and other natural resources and overall environmental quality, and (iii) against residential, agricultural and/or commercial disturbance;
(5) The amount of damages, as well as insurance, liability and indemnification requirements; and
(6) Any and all factors deemed important by the parties.
(7) In the event the parties can not agree on all, or any part of, the terms of the Surface Use Agreement within sixty (60) days following the meeting, then each party shall have ten (10) days to appoint an arbitrator and the two arbitrators shall agree upon a third arbitrator. If a third arbitrator cannot be agreed upon, then the parties shall appeal to the Osage County District Court, as the court of competent jurisdiction, which shall have twenty (20) days to select the third arbitrator. After the third arbitrator has been selected, the arbitrators shall have thirty (30) days to assess value, location, size or any matters aggrieved upon and make a decision regarding the contested terms of the Surface Use Agreement. It shall require a minimum of two (2) arbitrators to make a final decision. In the event one party does not appoint an arbitrator or does not abide by the date limits set forth herein, then the Osage County District Court shall also appoint such arbitrator. The award shall be paid by the Lessee to the surface owner within ten (10) days following the final decision. The arbitrators shall be disinterested persons. For purposes of this section, a person is considered disinterested, provided the person or the person's spouse, parent, child or sibling (1) is not a party to the contract or transaction or materially involved in the conduct that is the subject of the claim or challenge; and (2) does not have a material financial interest in the outcome of the contract or transaction or the disposition of the claim or challenge. Each Lessee or his authorized representative and claimant shall pay the fee and expenses for the arbitrator appointed by him. The fees and expenses of the third arbitrator shall be borne equally by the claimant and Lessee or his authorized representative. Nothing herein contained shall be construed to deny any party the right to file, within sixty (60) days of the rendering of the final decision, an action in the Osage County District Court, or other court of competent jurisdiction, if he is dissatisfied with the arbitrators' decision."

226.37(a): **Use of Surface.**

Comment: 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 proper burial of gathering and electric lines. The BLM's Best Management Practices contain language which minimizes

surface disturbance and encourages better protection of land and water.[2] This provision should also reference that the use of the surface shall be governed by the Surface Use Agreement. Instead of the Superintendent being the decision maker re: routing of pipelines, electric lines, etc. in the event the parties disagree, this should be governed immediately by arbitration.

Alt. Language: "Lessee or its authorized representative shall be governed by the Surface Use Agreement, the terms of 25 C.F.R. Part 226 regarding use of surface land, and the Bureau of Land Management's Best Management Practices (BMP), in all aspects of its oil and gas development. In the event of a conflict between the terms of the Surface Use Agreement, the terms 25 C.F.R. Part 226, and the BMP, the terms most favorable to the Surface owner shall control."

226.37(b): Water.

Comment: Water is governed by state law in Osage County, not by the CFR.

Alt. Language: "The right to use of water for lease operations shall be governed by the laws of the State of Oklahoma."

226.37(c): Lessee's Operational Obligations.

Comment: This needs to be greatly expanded to cover the full range of potential impacts.

Alt. Language: "Lessee shall conduct his/her operations in a workmanlike manner, commit no waste and allow none to be committed upon the land, nor permit any avoidable nuisance, threats to the public health or safety, or pollution of air, land, surface or ground water, wildlife, other natural resources or overall environmental quality of the land. All oil and gas activities shall be conducted pursuant to the terms and conditions of the Surface Use Agreement, so as to not unduly interfere with the ongoing operations and private property rights of the Surface owner."

226.38(a): Commencement Money and Size of Pads.

Comment: Generally, the amounts for damages are grossly inadequate to compensate the Surface owner for the full range of impacts, disruptions and loss of use from oil and gas development. In addition, the size of well pads during construction and operations should be as limited as possible.

Alt. Language: "Before commencing actual exploration and/or development, Lessee and Surface owner shall agree as part of the Surface Use Agreement the amount of commencement money to be tendered to Surface owner, but in no event shall such amounts be less than (i) $4,000 per linear mile for 2D seismic line laid on the ground, (ii)

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[2] See BLM's Best Management Practices at http://www.blm.gov/wo/st/en/prog/energy/oil_and_gas/best_management_practices.html

$25.00 per acre for 3D seismic exploration, (iii) $10,000 per acre for each well pad, tank battery or compressor station constructed, and (iv) $10,000 per acre equivalent for roads, flow lines, and electric transmission lines."

226.38(a)(1): "Following execution of the Surface Agreement and tendering of the commencement to Surface owner, Lessee shall have possession of the drilling site pursuant to the terms of the Surface Agreement."

226.38(a)(2): "Commencement money will be required for the re-drilling of a well originally drilled under the current lease that has been previously plugged, abandoned or reclaimed."

226.38(a)(3): "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. During drilling, the size of a horizontal well pad shall be no greater than three (3) acres and for vertical wells shall be no greater than one and a half (1.5) acres. Within ninety (90) days of well completion, Lessee will (i) 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 three-quarter (.75) acres for horizontal wells, and no greater than one-third (.3) acres for vertical wells, and (ii) restore the original contour and soil profile (topsoil on top) of the unused portion of the well pad, and plant vegetation per the instructions of the Surface owner. The Lessee is encouraged to drill multiple wells from one well pad site to reduce the amount of surface impact."

226.38(b): Schedule for Payments.

Comment: The schedule for tendering payment of commencement/damage payment should be governed by the Surface Use Agreement.

Alt. Language (second sentence): "All other Surface owners shall be paid or tendered such commencement money directly in accordance with the schedule set forth in the Surface Use Agreement."

226.39 Tank Fees.

Comment: This provision should be folded in to the Commencement Money provision at Section 226.38(a).

226.40: Settlement of Damages.

Comment: The rules of arbitration defined in Alt. Language for 226.36(b)(1) and (2) shall apply to this section.

226.41: Settling Damages Post Construction.

Comment: This needs to be governed by the Surface Use Agreement first, and then subject to the arbitration standard outlined in 226.36(b).

Alt. Language: "Where the Surface owner or his lessee suffers damage due to the oil and gas operations and/or marketing of oil or gas by Lessee or his authorized representative,

the procedure for recovery shall be governed by the Surface Use Agreement, or if not discussed therein, shall be subject to the arbitration provision described in Section 226.36(b)."

226.44: Prohibition of Pollution.

Comment: This section is grossly inadequate, is far less protective of land, air, water and the environment in general than any other Federal or State rule, and needs to be greatly expanded.

Alt. Language:
226.44 (a): "All Lessees, contractors, drillers, service companies, pipe pulling and salvaging contractors, or other persons shall at all times conduct their operations and drill, equip, operate, produce, plug and abandon all wells drilled for oil or gas, service, saltwater injection or exploration (including seismic, core and stratigraphic holes) in a manner that will prevent (i) pollution of air, land, surface and ground water and the migration of oil, gas, salt water or other substance from one stratum into another, including protection of all fresh water bearing formations, (ii) damage to wildlife habitat, other natural resources and overall environmental quality, and (iii) threats to public health and safety. When oil-based drilling fluid is being used, the operator shall use a closed-loop fluid system and all associated waste will first be properly disposed of by recycling, and if not commercially recyclable then by hauling to approved disposal sites, or injection. All flow back fluids used in hydraulic fracturing will be either recycled or reused, and only if not commercially recyclable or reusable then disposed of by injection. All pits and tank sites, regardless of use, should be lined with impermeable plastic of at least thirty (30) mil, unless otherwise approved by Surface owner. Surface disposal (land spreading) of drilling fluids and cuttings is prohibited unless otherwise authorized by Surface owner."

226.44(e): "Deleterious fluids other than fresh water drilling fluids used in drilling, completion or workover operations, which are displaced or produced in well completion or stimulation procedures, including but not limited to fracturing, acidizing, swabbing, and drill stem tests, shall be collected into a pit lined with impermeable plastic of at least thirty (30) mil or a metal tank and maintained separately from above-mentioned drilling fluids to allow for separate disposal. Pits located at tank batteries shall also be lined with impermeable plastic of at least thirty (30) mil."

226.45: Lessee's Environmental Obligations.

Comment: This needs to be greatly expanded to include the full scope of potential environmental impacts along with expressly requiring compliance with BLM Onshore Orders 1-7.

Alt. Language:
226.45(a): "The Lessee shall conduct operations in a manner which protects the mineral resources, air, land, surface and ground water, wildlife habitat, other natural resources, and overall environmental quality. In that respect, the Lessee shall comply with the pertinent orders of the Superintendent, including Bureau of Land Management Onshore Orders No. 1-7 and other standards and procedures as set forth in applicable laws and

regulations, terms and conditions of the lease and the Surface use Agreement, and applicable American Petroleum Institute (API) standards and recommended practices, and the approved drilling plan or subsequent operations plan. Flaring of natural gas must be conducted in accordance with § 226.60(f). Venting of natural gas is strictly prohibited pursuant to § 226.60(g)."

226.45(b): "The Lessee shall exercise due care and diligence to assure that leasehold operations do not result in undue (i) damage to surface or subsurface resources or surface improvements, air, land, water, wildlife habitat, other natural resources and overall environmental quality, and (ii) interference with Surface owner's use of his property. All produced water must be recycled if commercially reasonable technology is available, and if not commercially available then such water shall be disposed of by injection into the subsurface, by approved pits, or by other methods which have been approved by the Superintendent and Surface owner. Upon the conclusion of operations, the Lessee shall reclaim the disturbed surface pursuant to the requirements of the Surface Use Agreement."

226.45(c): "All spills or leakages of oil, gas, other marketable products, produced water, saltwater, toxic liquids, H2S gas, or waste materials, blowouts, fires, and injuries or fatalities involving persons, livestock, or wildlife shall be reported by the Lessee to the Superintendent as soon as discovered, but not later than the next business day."

226.45(d): "When required by the Superintendent, a contingency plan shall be submitted describing procedures to be implemented to protect life, public health, property, and the environment."

226.45(f): "The amount and type of chemicals used in a hydraulic fracturing operation shall be reported by the operator to www.fracfocus.org within sixty (60) days of hydraulic fracturing completion for public disclosure."

226.46: Safety.

Comment: In addition to the general language to operate in a safe manner, there must be explicit reference to a major safety issue in Osage County concerning H2S (hydrogen sulfide), and in particular the BLM Onshore Order 6 re: H2S gas and OSHA Rules for Hydrogen Sulfide Precautions for Oil and Gas Well Drilling and Servicing.[3] There should also be an express prohibition against the leaving of REDA cable on the surface of the ground, which poses an electrocution hazard to humans and livestock alike.

Alt. Language: "The Lessee shall perform operations and maintain equipment in a safe and workmanlike manner. The Lessee shall take all precautions necessary to provide adequate protection for the health and safety of life and the protection of property. Such precautions shall not relieve the Lessee of the responsibility for compliance with other

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[3] See BLM Onshore Order # 6 at http://www.blm.gov/wy/st/en/programs/energy/Oil_and_Gas/docs/onshore_order_6.html; see also OSHA Rules for H2S at https://www.osha.gov/SLTC/etools/oilandgas/general_safety/h2s_monitoring.html.

pertinent health and safety requirements under applicable laws or regulations, including Bureau of Land Management Onshore Order No. 6 and § 226.60 of this title regarding H2S, OSHA Rules for Hydrogen Sulfide Precautions for Oil and Gas Well Drilling and Servicing, and API Recommended Practice RP 49 and RP 68. In addition, Lessee shall comply with all regulations governing the proper use and placement (not on the surface of the ground) of electrical wiring and REDA cables to avoid in all circumstances electrocution hazards to humans and livestock."

226.47: Easements for wells off Leased premises.

Comment: This should be subject to consent of the Surface owner as well.

Alt. Language (first sentence): "The Superintendent, with the consent of the Osage Minerals Council and the Surface owner(s), may grant commercial and noncommercial easements for wells off the leased premises to be used for purposes associated with oil and gas production."

226.48: Water.

Comment: 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. 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.

Alt. Language: "The Lessee's use of water shall be governed by the laws of the State of Oklahoma and the Surface Use Agreement."

226.53 Disposition of Casings, Improvements.

Comment: Osage County is littered with abandoned oil field wells, pumping units and equipment as well as pools of oil and saltwater on the surface. There must be better oversight and quality assurance that permanently abandoned 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. In addition, wells that are "shut in" or "temporarily abandoned" are left in that state for far too long; there needs to be a time limit of perhaps 3 years for which wells can be temporarily abandoned before producers should be required to permanently plug them and reclaim the well site.

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.

Alt. Language:
226.53(a): "Upon termination of lease, permanent improvements, along with personal property, shall be removed from the property unless otherwise provided by the Surface Use Agreement. Personal property, which shall include without limitation tools, tanks, pipelines, electric transmission lines, pumping and drilling equipment, derricks, engines, machinery, tubing, and the casings of all wells, shall be removed within ninety (90) days of lease termination or such reasonable extension of time as may be granted by the Surface owner. Otherwise, the ownership of all casings shall revert to Lessor and all other personal property and permanent improvements to the Surface owner. Nothing herein shall be construed to relieve Lessee of responsibility for removing any such personal property or permanent improvements from the premises if required by the Surface owner in the Surface Use Agreement and restoring the premises as nearly as practicable to the original state. The Superintendent shall inspect the premises for compliance with this provision and non-compliance shall result in the payment of damages to the Surface owner."

226.53(d): "Lessee shall plug and fill all dry or permanently abandoned wells, along with those wells that have been temporarily abandoned for more than three years, pursuant to the Surface Use Agreement and in any event in a manner to confine the fluid in each formation bearing fresh water, oil, gas, salt water, and other minerals, and to protect it against invasion of fluids from other sources. Mud-laden fluid, cement, and other plugs shall be used to fill the hole from bottom to top: Provided, that if a satisfactory agreement is reached between Lessee and the Surface owner, subject to the approval of the Superintendent, Lessee may condition the well for use as a fresh water well and shall so indicate on the plugging record. The manner in which plugging material shall be introduced and the type of material so used shall be subject to the approval of the Superintendent. Within 10 days after plugging, Lessee shall file with the Superintendent a complete report of the plugging of each well. When any well is plugged and abandoned, Lessee shall, within 90 days, remediate the well site by restoring the original soil contour and soil profile (topsoil on top), and plant vegetation per the instructions, and to the satisfaction, of the Surface owner. The Superintendent shall inspect each dry and/or abandoned well for compliance with this provision and non-compliance shall result in the payment of damages to Surface owner. Lessee's obligations and liabilities under this section are continuing and shall survive the termination of Lessee's rights to develop the oil and gas mineral estate underlying the property."

226.56(a): Well Records

Comment: 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 is critical for addressing the freshwater aquifer data needs discussed below in Section 226.59. Well Records and water well testing should be done within 2,000 ' of each oil or gas wellbore. In addition, Lessees should be required to keep cement well logs for all cement jobs across the freshwater zone. This will assure the well has been properly cemented, improve safety, sustained casing pressure and avert potentially catastrophic events related to gas migration.

Alt. Language:
226.56(a) (to be added at end): "Lessee shall report all freshwater well drilling data to the Bureau of Indian Affairs and Oklahoma Water Resources Board. Well records and water well testing shall be done within two thousand (2,000) feet of each oil or gas wellbore. All drilling data and testing reports shall be posted on the BIA's website for public review."

226.56(c)2: "Lessee shall keep and deliver to Superintendent a copy of all electrical, mechanical or radioactive log, a cement bond log for all wells, or other types of survey of the wellbore, which data shall be posted on the BIA's website for public review."

226.56(f): "Lessee shall furnish a plat showing the location, designation, and status of all wells on the leased lands, together with such other pertinent information as the Superintendent may require, which plat shall be posted by BIA on its website for public review."

226.57: Line Drilling.

Comment: The distances between drilling and important landmarks need to be adjusted.

Alt. Language: "Lessee shall not drill within 300 feet of boundary line of leased lands, nor locate any well or tank within 200 feet of any public highway, 600 feet of any established watering place, or 1,000 feet of any building used as a dwelling, granary, or barn, except with the written permission of the Surface owner or Superintendent. Failure to obtain advance written permission from the Superintendent shall subject Lessee to cancellation of his/her lease and/or plugging of the well."

226.59: Formations Protected.

Comment: Section 226 does not address the issue of well surface casing, 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 200 feet 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 either as a supplement or total replacement.[4]

Alt. Language: "Lessee shall, to the satisfaction of the Superintendent, take all proper precautions and measures to prevent damage or pollution of oil, gas, fresh water, or other mineral bearing formations. Surface casing shall be required to a depth of two hundred (200) feet below that depth recommended by the most current and accurate Bureau of Indian Affairs' data and/or maps to insure freshwater protection. Lessee shall 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 two thousand (2,000) feet of wellbores, with results of such testing reported to the Bureau of Indian Affairs and Surface owners. Lessee shall also comply with Bureau of Land Management Onshore Order No. 1."

226.60: Well Control.

Comment: This section is woefully inadequate, and the requirements are not even based on current industry best practices or API specifications API RP 49 and 68. The BIA should substitute BLM Order # 2, which does a much better job of well control in place of this section.[5]

In addition, 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." In addition, all Lessees must install monitoring systems allowing them to be notified remotely if there is a violation relating to H2S flaring or venting, so that remedial action can be taken to eliminate threats to human and livestock health and safety.

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[4] The State of Pennsylvania already requires this. In addition, DOI should also review the 2009 Report by the U.S. Department of Energy, the National Energy Technology laboratory and Groundwater Protection Council (GWPC) entitled "State Oil and Natural Gas Regulations Designed to Protect Water Resources," which established a framework within regulatory programs to insure adequate protection of the environment, especially water, from oil and gas development. See also BLM Onshore Order # 1 at http://www.blm.gov/wo/st/en/prog/energy/oil_and_gas/Onshore_Order_no1.html.

[5] See BLM Onshore Order 2 at http://www.blm.gov/wy/st/en/programs/energy/Oil_and_Gas/docs/onshore_order_2.html

Alternative Language:
226.60(b)(New sentence at end): "Lessee shall comply with Bureau of Land Management Onshore Order No. 2 regarding well control. Operators shall follow API Recommended practices API RP 49 Drilling and Well Servicing involving hydrogen sulfide and API RP 68 servicing and workover operations involving hydrogen sulfide."

226.60(e): "Surface casings shall be properly cemented to the surface. Lessee shall follow Bureau of Land Management Onshore Order No. 1 and the American Petroleum Institute Recommended Practice RP 65."

New 226.60(f): "The Operator shall conduct third-party testing of gas when flaring of natural gas is conducted. The results of this testing shall be provided to the Superintendent and the Surface owner. If such test results show the natural gas contains H2S in excess of 10 ppm, the operator must utilize a "clean-burn variable tip flare" and/or the best current flaring technology for the oil and gas industry, as recommended by the American Petroleum Institute, to reduce the hazards from H2S and its flared byproducts to human health, livestock, wildlife, soils, water, and air quality. All flaring of natural gas shall be done in a manner to eliminate the visibility of the flame and produced light using a closed-combustion chamber system. In addition, Lessee shall install monitoring systems at every well that can report H2S violations remotely to Lessee's employees or contractors so that immediate action can be taken to eliminate any threats to human or livestock health and safety."

New 226.60(g): "Venting of any gas containing H2S is strictly prohibited."

226.65: Site Security.

Comment: Surface landowners should be also consulted and the proposed security plan should be included in a surface use agreement.

Alt. Language (New subsection (b)(8)): "Surface owner(s) shall be consulted regarding site security and the proposed security plan should be included in the Surface Use Agreement."

New Subsection (c)(4): "The site security plan shall be included in the written Surface Use Agreement between the Surface owner and Lessee."

226.66: Accidents.

Comment: There is no provision for reporting environmental accidents, i.e. salt water spills, oil spills, H2S leaks, injuries/deaths of persons, or killing or injury of livestock or wildlife. These need to be added.

Alt. Language: "Lessee shall make a complete report to the Superintendent and Surface owner(s) of all accidents, fires, or acts of theft and vandalism occurring on the leased premises as soon as discovered, but not later than the next business day. Said report shall

include an estimate of the volume of oil and/or saltwater involved. Lessees also are expected to report such thefts promptly to local law enforcement agencies and internal company security. These reporting requirements shall also apply to environmental accidents, including but not limited to, salt water spills, oil spills, H2S leaks, injuries to persons, and injuring or killing of livestock and wildlife."

226.67: Penalties for Lease Violations.

Comment: 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.

226.68: Penalties for Specific Violations.

Comment: 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.

Alt. Language (new subsection (l)): "For failure to avoid pollution to air, land, water, wildlife habitat, other natural resources and overall environmental quality, $1,000 per day."