

Jesse Juen

August 14,, 2014

U.S. Bureau of Land Management

New Mexico State Office

PO Box 27115

Santa Fe, New Mexico 87502

I am writing to protest the lease sale of parcels identified in the October 2014 Competitive Oil and Gas Lease Sale, EA Log Number:Do1-BLM-NM-F010-2014-0154-EA, parcels NM-201410, 001 and 004-0015 inclusive.

My Interest

I am a long time New Mexico resident, homeowner, and moved to Abiquiu after retiring after 30 years as an environmental consultant. I moved to the unspoiled and scenic part of New Mexico to enjoy the views, quiet atmosphere, freedom from traffic and relative abundance of clean unpolluted air and water. I am concerned that BLM and NFS oil and gas development on the fringes or into the Rio Arriba County designated Frontier District is the beginning of a creep over the geologic structure at the very borderline of the San Juan Basin will creep my way. I am further concerned to preserve the quantity and quality of clean water in the Rio Chama watershed, as well as my private water well and property values. And as a responsible human, I do not think the use of 10 million gallons of fracking water per well, each fracking event, is justifiable in a state where water resources are critical and dwindling. The trade-off for oil revenues is not a deal I can, in good conscience, support.

Reason

I have lived previously in oil-boom areas and found the quality of life drastically lowered as oil field development increases. There were constant large trucks and traffic, traffic controls to accommodate building of access roads and pads, large tankers carrying water, road dust, erosion, rowdy out of town specialized labor presenting an unwholesome atmosphere for families, especially women and children. Unspoiled scenery was no longer beautiful to photograph, camp, raft, and attract tourist business. The air turned brown with pollution from diesel engines. Property values plummeted. Jobs that were expected for local workers were minimal and of short duration as experienced construction teams, heavy equipment operators and roughnecks, roustabouts, drillers, tool pushers, mud loggers and other drilling specialists who work as itinerant labor were brought in for high paying jobs.

I do not want to take a chance of that happening in the Santa Fe National Forest, nor take the chance of increases seismic activity, unhealthy chemical contamination in ground and surface waters, and road traffic and maintenance far beyond the capacity of single two lane roads through the area.

I am also concerned about flaring accidents and visual impacts. In the Santa Fe national Forest, skies are clear and stars are bright. Unlike areas where there are cities and numerous wells flaring in the San Juan

Basin, impacts to night skies and visual aesthetics cannot be well mitigated or dismissed as insignificant. Windy conditions prevail along the uplift locations where NFS parcels are located, and terrain is steep and cut with ravines. While clearing of trees from access roads and around drill pads and flare pits is somewhat effective in preventing forest fires, they can spread very quickly and response and access are difficult. It is unlikely adequate supplies of water can be maintained on site to quench a runaway fire.

Further, The EA recognizes no difference in the geology and groundwater characteristics in the central part of the Basin, where groundwater quality is poor (1000 mg/l Total Dissolved Solids) and there is lots of data on structure and depth of geologic strata and performance of aquatard layers under high pressure fracking. This is very clearly not the likely case in the proposed NFS parcels, which are perched largely on steep land with jumbled geology at the uplift and undocumented hydro geologic characteristics. The groundwater aquifer on the east side of the continental divide is of provably excellent quality, unlike the Morrison groundwater aquifer in the San Juan Basin described in the EA. The groundwater here is believed to have flow and potential for hydraulic connection via natural faults, springs, and surface water drainage to the Chama Watershed. The EAs failure to recognize differences, let alone identify that there are uncertainties and unknown levels of risk, leaves me with no confidence that safe development of oil and gas resources is the BLM goal.

In addition, as a trained physicist and Environmental and Water Resources Engineer, and having both prepared NEPA EA and EIS documents as well as comment responses and revisions, it is clear to me that the BLM understanding of the NEPA process is faulty. The EA is tired down from EIS documents for the BLM Resource Management Plan, completed in 2003, that did not consider risks and benefits of drilling and high tech horizontal fracking. The BLM has recognized the need to amend that 2003 RMP and states in this EA that BLM, BIA and private parcels previously identified in the first EA draft as part of the proposed action, have been "deferred until after the FFO Mancos Shale/Gallup Formation RMPA/EIS alternatives have been developed."

The EA states that NFS parcels, now the only ones left as the Preferred Alternative C, have already been addressed in U.S. Department of Agriculture (USDA) in their Final Environmental Impact Statement (FEIS) for Oil-Gas leasing and Roads Management, Santa Fe national Forest, New Mexico (June 2008), and the USDA Record of Decision for Oil -Gas Leasing and Roads Management, Santa Fe National Forest, New Mexico (2008), the USDA Final Supplement to the FEIS, Rio Arriba and Sandoval Counties, New Mexico (2012) and USDA Record of Decision for Oil and Gas leasing, Santa Fe national Forest, Rio Arriba and Sandoval Counties, New Mexico (2012) Review of all these referenced documents was supposedly completed and information was found to be sufficient to support a Finding of No Significant Impact for the Preferred Alternative in this EA. In fact, the geology descriptions in the USDA documents repeatedly incorporate by reference the outdated BLM 2003 RMP, already acknowledged in the EA by the BLM as being insufficient to support leasing of the parcels in the initial EA that the BLM deferred (BLM, BIA and private property), because they presumably did not have adequate information to support a Finding of No Significant impacts.

In fact, having reviewed all these Forrester Service NEPA documents personally, I find no real detail on the geology and hydrogeology of these proposed parcels. In fact, on Page 84 of the FEIS Supplement, the USDA states that "Groundwater is not likely to be affected for Forest Service activities, but *may be*

*adversely impacted by other activities in the region such as drilling of domestic water wells and oil-gas development."* (Italics added). This statement is not even mentioned in the BLM EA, let alone discussed. It definitely does not meet the standard of BLM responsibility to assure that USDA Forest Service documents referenced are adequate to support a FONSI for leasing of these parcels.

The most troubling aspect of this EA is the failure to perform a detailed analysis of each parcel. The EA states that this will be done in Environmental Assessment for the Application for Permit to Drill, after lease sale is completed. The dirty little truth disguised here is that after the lease sale, the BLM has to find a way to issue a permit to drill to any lessee who requests one. It is too late, at this point, to do the detailed study deferred by the Lease EA, especially if detailed study indicates that there are significant uncertainties and risks, due to lack of information of potential geologic anomalies. That needs to be addressed before the decision to lease is made and the Leasing FONSI issued.

Detailed analysis is needed for LEASE of NFS parcels located on the Nacimiento Uplift, where there is little documented information, and there are significantly greater uncertainties than are described in the Lease EA.

Per Michael Goodman, lawyer and NEPA Specialist at BLM State Office, stated that "once a lease has been issued, the lessee has a right of development." Essentially, a Permit to Drill must be issued. Otherwise, there is a potential of a lawsuit against BLM by the lessee alleging "Illegal Taking" of mineral resources leased.

Here is the exact language of the requirement:

43 CFR § 3101.1-2 Surface use rights.

"A lessee shall have the right to use so much of the leased lands as is necessary to explore for, drill for, mine, extract, remove and dispose of all the leased resource in a leasehold subject to: Stipulations attached to the lease; restrictions deriving from specific, nondiscretionary statutes; and such reasonable measures as may be required by the authorized officer to minimize adverse impacts to other resource values, land uses or users not addressed in the lease stipulations at the time operations are proposed. To the extent consistent with lease rights granted, such reasonable measures may include, but are not limited to, modification to siting or design of facilities, timing of operations, and specification of interim and final reclamation measures. At a minimum, measures shall be deemed consistent with lease rights granted provided that they do not: require relocation of proposed operations by more than 200 meters; require that operations be sited off the leasehold; or prohibit new surface disturbing operations for a period in excess of 60 days in any lease year."

Once the lease sale has occurred, lease parcels will be drilled if lessee requests a permit, and detailed analysis promised in Leasing EA will only be relate to where and how parcel will be drilled.

A Permit to Drill may be issued with modifications based on site specific issues noted at time of permit review. At that time, adding conditions of approval or mitigation measures, or moving requested drill site up to 200 meters may well be insufficient to prevent adverse impacts to groundwater, surface water and

human health and the environment. The Application for Permit to Drill (APD) EA would assess only alternatives to requested drilling program and location, and does not consider not issuing a permit.

Therefore, the Lease Sale EA, stating that no detailed analysis will be done at this due to site specific variations, is not appropriate to support a Finding of No Significant Impact (FONSI) where there is uncertainty about geology structure and strata, watershed, hydraulic connections to surface water, depth of producing formation. This uncertainty exists along the transition out of the San Juan Basin in the uplift area where most Forest Service Parcels are located. The EA does not address the lack of data and degree of uncertainty. It describes only the better known characteristics of groundwater, drainage and geology in the central San Juan Basin which is well documented. Nor do the Forest Service NEPA documents cited in the BLM Lease EA address uncertainties in this area.

Uncertainties and potentially erroneous statements in the EA were confirmed by an independent consulting geologist formerly with the US Geological Survey in New Mexico, as well as by an off-the-record review by the New Mexico State Engineer's Office On August 13, 2014. Michael Darr further details uncertainties in a separate protest letter that will be sent regarding this EA.

Also, Western Environmental Law Center's protest letter details this cart-before-horse fallacy. The WELC protest letter cites NEPA act requirements in detail as well as court case precedents.

Please defer leasing of Preferred Action Alternative C NFS Parcels until an appropriate level of detail is available to support a FONSI. The USDA National Forest Service NEPA documents for the NFS parcels do not provide an adequate basis to support a BLM FONSI.

Please send my copy of protest responses to my address PO Box 736, Abiquiu, NM, 87510.

Thank you for careful consideration of the issues I have identified, and thank you to BLM staff for providing timely responses to requests for clarification of statements and processes pertinent to this lease sale.



Peggy Baker