

**OIL & GAS WORKSHOP**  
**Feb. 11, 2009**  
**Dolores, Colo.**

The public workshop, which provided an overview of several topics related to energy development, was presented by Montezuma County and the San Juan Public Lands Center at the Dolores Public Lands Office. Approximately 30 citizens attended.

**Split estates**

Jamie Sellar-Baker, associate manager of the Dolores Public Lands Office (DPLO) of the San Juan Public Lands Center (SJPLC), gave a presentation on the concept and ramifications of split estates, which occur when different people or entities own the surface and sub-surface rights for the same tract of land. Her focus was on private/federal split estates, where the surface is privately owned and the sub-surface mineral rights are owned by the federal government, but there are many possible types of split estate.

Jamie offered a short history of how split estates came to be. Until 1910, the U.S. government's homesteading policies had allowed citizens to acquire free land out west merely by settling it. In 1910, recognizing the value of the mineral rights underneath that land, Congress began retaining more and more of the sub-surface rights when land was sold or given to homesteaders, thus creating split estates. The Bureau of Land Management (BLM), which is the agency that holds federal mineral rights, now manages 700 million acres of sub-surface mineral rights nationwide. Locally, the BLM, U.S. Forest Service and BLM Canyons of the Ancients National Monument own 2.5 million surface acres and 1.4 million acres of sub-surface rights.

For federal public-lands agencies, the Resource Management Plan (RMP) is the foundation for decisions about oil and gas leasing. Lands can be designated as either open or closed to leasing. Types of lands that are generally closed to energy leasing include wilderness areas and wild and scenic rivers. For those lands that are to be leased, there may be lease stipulations that restrict activities to some extent.

The federal agencies regularly update their RMPs. The SJPLC is going through such a process now; its final plan will probably be released by the end of 2010. A supplement relating to oil and gas development will be part of that plan; the supplement is being written now and should be out for public comment in late summer or early fall of 2009.

When BLM officials receive an Application for Permit to Drill (APD), it identifies the land status and ownership. In the case of private/federal split estates, BLM officials encourage the private landowner to participate in the leasing and development process from beginning to end. So long as the landowner allows reasonable access to the sub-surface minerals, the BLM will defer most decisions about where oil or gas wells will be located to the landowner and operator. The BLM requires operators to engage the landowner in negotiations to try to reach a surface use agreement that will cover such topics as access, compensation, reclamation, and more. Compensation can be purely financial or can be by other means, such as making the operator improve a road.

In the rare event that a surface use agreement cannot be reached, the BLM will seek notification and verification that there has been a good-faith effort by the operator to try to reach an agreement with the landowner. If no agreement can be reached despite

this effort, the operator may be allowed to “bond on,” meaning the operator will be granted access despite the landowner’s objections and the landowner will typically receive less compensation. In that case, the BLM acts as arbitrator.

Operators are required to post bond. There are two types of bond:

- A performance bond with the BLM to ensure compliance with rules, including costs of reclamation of energy-development sites.
- A surface owner protection bond (aka damages bond or 3814 bond). If a surface use agreement cannot be reached between the operator and surface owner, the BLM requires a separate bond to protect the landowner from reasonable and foreseeable damages such as damage to crops, depending on the statutes under which the land was patented. The minimum amount of such a bond is \$1,000. A damages bond is filed with the BLM. The landowner has 30 days to object to the bond terms. The BLM will review objections and either reject or accept them. Either party then has the right to appeal the decision to the Interior Board of Land Appeals.

The BLM conducts inspections on a priority ranking system. If the surface owner believes the operator is in non-compliance, he/she should tell the BLM, which will investigate and take appropriate action.

Following reclamation, the landowner can attend the reclamation inspection and share concerns with the BLM. The agency consults with the landowner before giving final approval to reclamation.

Jamie said she has been involved in four instances when the BLM had to capture an operator’s bond. Once that is done, the operator is in effect “blackballed” in that state and finds it difficult to get new leases.

Jamie said there are ways to reduce the impact of energy development on private lands. These include the use of Best Management Practices (BMPs) to minimize road traffic, minimize noise, maintain scenic qualities, and protect property values. BMPs can include minimizing the drilling footprint, choosing an aesthetically pleasing color for buildings, and doing interim reclamation while development continues. For more information on BMPs, split estates, and more, see [www.blm.gov/co/st/en/BLM\\_Programs/oilandgas.html](http://www.blm.gov/co/st/en/BLM_Programs/oilandgas.html).

### **Surface use agreements**

Josh Joswick, an organizer with the San Juan Citizens Alliance and a former county commissioner in La Plata County, said there is little that private landowners can do to stop energy development on their property when the mineral rights are held by another entity. However, landowners can direct that development through the surface use agreement.

A ruling by the Colorado Supreme Court in 1997, *Gerrity Oil and Gas Corp. vs. Magness*, addressed the issue of surface owners’ rights vs. mineral owners’ rights. It established that in cases of split estate, each entity has rights. There is an obligation to allow the development of energy rights but it must be done with respect to the rights of the surface owner. Mineral-rights holders must “accommodate surface owners to the fullest extent possible consistent with their right to develop the mineral estate”. Before

this ruling, there had been confusion over whether the mineral estate was dominant. The state supreme court in effect equated the estates.

In 2007 the Colorado legislature passed HB 1252, which also addressed the issue of split estate. It said the operator must minimize intrusion upon and damage to the surface of the land. Minimizing intrusion can mean finding alternate locations for wells, roads, or pipelines so long as the alternate sites are technologically sound. Failing to minimize intrusion can give cause for a lawsuit, and the burden of proof then falls upon the operator. This does not, however, prevent an operator from using the surface as needed to explore for and produce oil and gas. HB 1252 was a historic piece of legislation, but its provisions have not been tested in court. For example, no one has defined what it means to “minimize impact”.

Surface owners should make certain they understand the surface use agreement they are signing. Keep it simple; have the agreement cover one well at a time. The operator should come back and renegotiate if there is to be further development.

The surface use agreement is the landowner’s contract and will help to protect his/her rights. But if you don’t reach a surface use agreement, as noted earlier, the operator may “bond on”. However, relief can be granted by the COGCC if there is unreasonable damage. The surface owner can request a consultation with the COGCC before the operator bonds on.

When negotiating a surface use agreement, landowners should consider:

- Getting a development plan lined out. Where will pads, roads, and a pipeline go? Can the size of the pad be minimized?
- Water issues. Perhaps baseline data on the quality of well water should be established.
- Land-use issues. What is the surface owner doing with the land, and what are his/her plans? What can the surface owner do with the well pad (e.g., park vehicles on it)?
- Quality-of-life, health and safety issues.

In the agreement, specify what constitutes a breach of agreement, how the operator will remedy it and how long the operator has to do so.

It is up to the surface owner to make sure he/she receives reasonable compensation. Generally the state does not become involved in this issue, although it does oversee factors such as air quality, water quality, and noise.

Whether to hire an attorney to help with negotiations is up to the surface owner. If you do hire an attorney, make sure it is one who specializes in oil and gas.

There are brochures and booklets available to help landowners. One is called “The Landowner’s Guide to the Colorado Protection Act” and another is “Oil and Gas at Your Door”.

### **Air-quality regulations**

Oil and gas development emits some air pollutants at every stage of production. Scott Patefield, enforcement lead for the oil and gas team of the Colorado Air Pollution Control Division, which regulate air quality, gave a presentation on air-quality regulations related to energy development.

Scott discussed emission thresholds. There are three types of permitting programs overseen by the Air Pollution Control Division:

- Air pollution emission notices (APENs). These forms are used by businesses to report emissions exceeding certain levels set for “criteria pollutants” such as nitrogen oxides, volatile organic compounds (VOCs), particulates and more. The limits are different in attainment areas (those where air quality is within U.S. Environmental Protection Agency standards) and non-attainment areas. Right now the only non-attainment area in Colorado is for ozone on the Front Range.
- Construction permits. These are required for new or modified sources that will emit air pollutants.
- Title V permits. These are required for activities that will be major producers of pollutants. These larger sources have greater reporting requirements.

Energy producers must comply with state air-quality regulations and obtain the necessary permit(s) for their operations. Ascertaining whether something will exceed emission thresholds usually requires relying on data from the manufacturer of the compressor engine, condensate storage tank, or other energy-related item. However, the state sometimes tests equipment in the field. In many cases, the tests show lower emissions than what the manufacturer projected.

Some state regulations regarding air quality have recently been revised to tighten restrictions on emissions and eliminate some previously existing exemptions to air-pollution requirements for produced-water tanks, condensate tanks and other energy equipment.

The Air Pollution Control Division has five inspectors statewide, of which Scott is one, and is hiring an additional inspector. To reach them call 303-692-3100 or e-mail [comments@apcd.state.co.us](mailto:comments@apcd.state.co.us). See the Colorado State Department of Public Health and Environment web site, [www.cdphe.state.co.us](http://www.cdphe.state.co.us), for more information.

### **Industry perspective**

Duane Zavadil, vice president for government and regulatory affairs with the Bill Barrett Corporation, discussed development prospects and the industry’s views.

The Bill Barrett Corp. is interested in obtaining natural gas from the Gothic shale layer, which lies about 1 mile beneath the surface in parts of Southwest Colorado. The Gothic shale is relatively thin, about 100 feet thick, which in the past was not enough to produce significant amounts of natural gas. However, new technology has enabled the operator to drill down to the layer and then drill horizontally along the Gothic shale, producing enough gas to make the well cost-effective. Shale is basically impervious rock; to extract the gas, you have to use a hydraulic fracturing (“fracing”) technique, which involves pumping a fracturing fluid into the well bore and causing the formation to crack, thus increasing the rate at which gas can flow out.

In this area, Bill Barrett now has three producing wells. At current prices, the cost of extracting the gas exceeds what the product will bring, but it is hoped that that will change. There are disadvantages to operating in the Rockies. One is that gas does not bring as high a price here. Another is that the market for the product is mostly along the coasts. Just 5 percent of the country’s population lives in the Mountain Time Zone. Sometimes production can exceed export capacity (pipelines).

Bill Barrett's current budget will support seven wells in this part of the country, but evolving techniques may enable them to do more. The company is "starting from scratch" in this play, meaning it can plan from scratch, which is a plus.

Duane discussed mitigation practices that can help minimize problems for surface owners. These include:

- Use of multiple-well pads and directional drilling
- "Green completions" for the final stages of drilling gas wells. Instead of venting or flaring excess produced natural gas, the operator recovers and sells it. Green-completion methods reduce air pollution.
- Centralized water management. Instead of building "frac" pits at each location, it is sometimes possible to move water back and forth to central locations. It is unlikely that Bill Barrett will be storing any exploration and production waste fluids in pits; they will flow back into tanks instead. The COGCC's new rules carry rigorous standards for frac pits that really preclude their use.
- Frac monitoring.
- Enhanced reserve-pit standards.
- Emission controls.
- Transportation planning and road maintenance. The company will be working with counties.
- Groundwater monitoring. The company will do this as corporate policy on standing water (streams, ponds, wells).
- Wildlife mitigation.

Green practices add to the cost of production. To build a double-lined frac pit as required under the new COGCC standards would cost nearly \$1 million, vs. \$20,000 for an unlined pit, although Duane is hopeful those costs can be reduced. Over time the standards are becoming relatively uniform. Operators expect the standards to continue to rise and hope that gas prices support the increased costs.

Duane also discussed water consumption. Bill Barrett Corp. will rely heavily on the use of ditch water. Approximately 2 acre-feet per drill bore is required for the fracing operation. All the water used so far has come from the Dolores Water Conservancy District. Bill Barrett is hauling all waste water to New Mexico and is not shipping any to evaporation ponds here.