

**STATEMENT OF MAT MILLENBACH,  
STATE DIRECTOR, MONTANA  
BUREAU OF LAND MANAGEMENT  
SENATE APPROPRIATIONS COMMITTEE  
SUBCOMMITTEE ON INTERIOR AND RELATED AGENCIES  
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Mr. Chairman and members of the Subcommittee, I appreciate the opportunity to appear here today to discuss the development of the coalbed methane resources of the Powder River Basin in Montana.

**Coalbed Methane Development in Montana**

As you know, the Powder River Basin contains large coal deposits that have methane gas trapped in the coal seams. Recently, there has been a significant increase in coalbed methane (CBM) production within the Basin – particularly in Wyoming, where over 8,500 private, state and federal CBM-wells have been drilled, and it is estimated that roughly 50 percent of them are now producing. Currently in Montana, there are about 215 producing CBM wells. All of these wells are non-federal wells. With rising natural gas prices, industry is interested in coalbed methane development in southeastern and south central Montana. More than 50 percent of the oil and gas estate within the Montana portion of the Powder River Basin with high or moderate potential for development of CBM is Federally-owned. Furthermore, approximately 60 percent of the Federal oil and gas estate in this portion of the Powder River Basin is already leased.

Recognizing that the environmentally responsible development of CBM resources can be an important element of our national energy strategy, I believe we should have the following three guiding principles:

- We need to set resource protection standards and make sure those standards are met;
- Industry should be responsible for the costs of developing the resource – not the neighboring landowners or taxpayers; and
- Companies must clean up after themselves and restore the land when their activities cease.

Before we can make permitting decisions that respond to the new and greatly expanded interest in CBM development, we need to have an up-to-date analysis of its potential impacts. To make this analysis of both conventional oil and gas and expanded coalbed methane development, BLM and the State of Montana are preparing a joint environmental impact statement (EIS). We began analyzing a 1998 industry proposal – by Redstone Gas Partners – to pursue limited CBM exploration and development in the Powder River Basin through an environmental assessment (EA). However, work on the EA was halted when our analysis showed that potential impacts were sufficiently significant to justify preparation of an EIS. The current EIS will include the Redstone area, and it will provide the foundation for oil and gas decisions made by each agency involved in this process.

For the State of Montana, the planning area (or scope) of the EIS is statewide with emphasis on the BLM planning area in southeast and south central Montana, and three areas in Blaine, Park and Gallatin Counties. A Memorandum of Understanding (MOU) signed by BLM and the Montana Department of Environmental Quality (DEQ) as co-leads is now being amended at the Governor's direction to include the Montana Board of Oil and Gas Conservation. An MOU also has been signed with Bureau of Indian Affairs (BIA) as a cooperating agency for preparation of the EIS. In addition, MOUs are being developed that would add the Crow and Northern Cheyenne Indian Tribes and the Environmental Protection Agency (EPA) as cooperators in the EIS. The MOUs outline the roles and responsibilities of each agency and provide guidance through the EIS process.

At this time, it seems likely that the scope for BLM's part of the EIS will focus on amending our Billings and Powder River Resource Management Plans (RMPs). We will make a final decision on the geographic scope after the contractor has completed an analysis of the public comments received during scoping.

The Powder River RMP area encompasses 2,522,950 acres of BLM-administered mineral estate, including oil and gas, in southeast Montana. The Billings RMP area encompasses the south central portion of Montana consisting of 662,066 acres of BLM-administered oil and gas mineral estate. These plans were written in the 1980s and were amended in 1994. At the time of the 1994 amendment, large-scale CBM development was not a major interest of industry. Our amendment reflected then-current and foreseeable needs and analyzed conventional oil and gas development and limited CBM exploration and production. The new EIS will include a reasonably foreseeable development scenario for both CBM and conventional oil and gas.

Scoping for the EIS began in December 2000. This past January, more than 300 people attended public scoping meetings in Miles City, Billings, Ashland, Broadus and Helena. The scoping period for the EIS ended January 31, 2001. BLM received about 200 letters during the scoping period. The major issues raised were related to the potential impacts of CBM development on groundwater and surface water resources, water quality, impacts to soil and land use, introduction of non-native plants and noxious weeds, and air quality.

During preparation of the EIS, BLM will process Applications for Permit to Drill (APDs) for conventional oil and gas wells, but for CBM wells we will only approve APDs for drilling and testing in areas not previously explored. Drilling and testing CBM wells will provide needed data concerning coal, gas and water that can be used for analysis in the EIS. Until our EIS is completed, CBM will not be produced for sale from any Federal wells, and any water produced from test wells will be contained on site in tanks or reserve pits.

Currently, CBM production only occurs from wells on private and State leases within the CX Field, which is located in Big Horn County. The State can approve up to 200 permits for drilling and testing CBM wells outside of the CX Field in Big Horn County in accordance with a settlement agreement with the Northern Plains Resource Council (NPRC). The State can continue to approve permits for conventional oil and gas wells during preparation of the EIS.

Industry has expressed interest in exploring for CBM in areas adjacent to the CX Field, as well as portions of Big Horn, Powder River, Carbon, Rosebud, Stillwater, Gallatin, Park and Blaine Counties. In response to this interest, these are among the areas that are likely to be evaluated in the EIS.

The NPRC also has served a Notice of Intent to file a lawsuit against BLM alleging that the Bureau approved APDs for conventional oil and gas and CBM wells in violation of the Clean Water Act. Although we believe we are in compliance with requirements of the Act, we are consulting with DEQ about each agency's roles and responsibilities under the Act. After completing the consultation, BLM will send a written response to the NPRC and also request a meeting to discuss the matter.

Presently, the EIS contractor is analyzing the public comments received during the scoping process to identify issues and alternatives for the draft EIS. The contractor is also collecting existing resource data that will be used to analyze impacts. We continue to consult and exchange information with State, Federal, and tribal agencies, as well as other interested parties. A newsletter detailing the status of the EIS will be available by June 2001.

We are planning to have a draft EIS available for a 90-day public review by the end of this year. Using this schedule, a final EIS could be ready as soon as the summer of 2002, which would be followed by a 30-day protest period.

BLM has signed a contract with Arthur, Langhus & Layne (ALL) to prepare the EIS. A subcontractor will assist ALL in the preparation of the EIS. Both companies have a wide range of experience and skills – including expertise in hydrology, soils, wildlife, and tribal consultation – that is needed to address oil and gas operations and to analyze their potential impacts. Work on the EIS between BLM and the contractor is progressing on schedule.

## **Important Issues to be Addressed**

### ***Water Issues***

Water is vital in the development of CBM. The CBM extraction process involves pumping water from the coal seams to the surface in order to reduce the water pressure that traps the gas in the coal. Coalbed methane wells are drilled into the coal seam with the casing sealed above the coal. A standard water pump is used to deliver water to the surface. The combined effect of many wells pumping simultaneously reduces the water level in the coal in the vicinity of the wells that are pumping. This lowers the water pressure and allows the methane to migrate up the well. Among other things, the public is concerned about potential cumulative effects to groundwater, how long it will take to recharge aquifers, and any potential harm to private water wells and springs.

BLM has met with the Montana Bureau of Mines and Geology (MBMG), the Department of Environmental Quality, the Board of Oil and Gas Conservation, and our EIS contractor to discuss ways to analyze potential impacts to groundwater. In order to complete the EIS, these parties agreed that the analyses need to address the major issues at both a regional and local level. We will attempt to identify areas that could experience the greatest impacts. Finally, we want to include a level of detail to show what could be expected at a local level to provide landowners with information for negotiating water well mitigation agreements. The approach agreed upon to address this analysis will result in a groundwater resources technical report. Part of this report will include 2-D Draw-down Models according to site-specific conditions representing 3 or 4 different groundwater situations and CBM development scenarios. The MBMG will actively participate by providing existing groundwater data and aquifer characteristics to the contractor and reviewing work products. After the Technical Report is completed, the groundwater analyses group, including the MBMG, the EPA and the other cooperators, will determine if the analyses' goals were achieved or if further analyses and more intensive modeling is necessary.

Managing the water produced with methane is a challenge to the oil and gas industry, as well as Federal and State regulators. We all need to work together to find the solutions and innovations to address the surface water issues and potential impacts to the entire land and water system, including soil, vegetation, and land use. All water disposal options would be handled in accordance with applicable laws and regulations and could include water reinjection, infiltration, treatment prior to discharge, discharge into waterways, and beneficial uses such as dust abatement, stock watering, creation of wildlife watering areas, and establishment of fisheries. The State of Montana, the BLM and the EPA are genuinely concerned with these water issues and will work to find the best options available. We will consider these water disposal options as we develop alternatives to analyze in the EIS. Our joint leadership in the EIS process, we believe, is the best course of action to achieve proactive solutions that will ensure any CBM development is conducted in an environmentally sound manner.

Monitoring wells will be used to assess the impacts to groundwater comparing actual drawdown conditions to those that are predicted in the EIS. Gauging stations have been installed to assess the impacts to surface waters from the discharge of produced water associated with methane production. Additionally, water quality sampling data will be obtained from other sites for this same purpose. Water quality samples are also required by the State of Montana's discharge permitting process to assess and maintain the quality of the receiving waters such that nondegradation standards are met.

### ***Air Issues***

BLM Montana and Wyoming are presently discussing the appropriate model to use to assess the impacts to air quality in Montana. BLM in both states is committed to sharing all resource data in the northern portion of the Powder River Basin that straddles the state line, such as soil, water, air, vegetation, wildlife, cultural, economic, etc., in order to better analyze cumulative impacts resulting from CBM development in both states.

### ***Reasonably Foreseeable Development***

A major step in completing the EIS is determining how much future development is reasonable to expect. In the fall of 2000, the oil and gas industry predicted approximately 10,000 wells could be drilled in the

northern Powder River Basin in Montana. Although BLM's review is still in the preliminary stage, we believe the number of CBM wells drilled in the area could be considerably higher than this estimate. Industry's analysis only took into consideration the upper Ft. Union sub-bituminous coals within the Powder River Basin in Montana and excluded the Ashland District of the Custer National Forest and Crow and Northern Cheyenne Tribal lands and bituminous coals. In addition to the areas included in the industry analysis, the BLM and State of Montana compilation of a reasonably foreseeable development scenario will include all mineral ownerships in the Powder River and Big Horn Basins in Montana, and several other areas of the state that contain coal resources. Because our analysis will be predicting CBM wells from the sub-bituminous and bituminous coals, it will cover many other areas besides the Powder River Basin.

### ***Subsurface Gas Drainage***

No subsurface drainage of CBM from Federal or Indian lands in Montana has been identified to this point. Because of well spacing, mineral ownership patterns, and the relatively low number of existing wells, we do not expect drainage to be an issue in the short term. However, this is an issue that definitely will have to be considered over the long term.

### **Public Involvement**

Public involvement is another important aspect of the EIS process. The process is inherently open – as dictated by law, policy, and our desire to continually inform the public. As part of our outreach program for the EIS, we will continue to schedule meetings with the CBM Coordination Group. BLM was instrumental in the formation of this group that is composed of Federal, State and tribal agencies, landowners, industry, and environmental groups. The group was formed to discuss issues and share information related to the EIS. In addition, we will meet with other members of the public as often as needed or requested. Finally, BLM will provide information needed to keep the public fully informed on the EIS process.

This concludes my prepared statement. I would be pleased to answer any questions that members of the Committee may have.