

**JOINT LEGISLATIVE AIR AND WATER POLLUTION
CONTROL AND CONSERVATION COMMITTEE**

Report on

**OIL AND GAS LEASING ACTIVITIES ON
COMMONWEALTH-OWNED LANDS**

PURSUANT TO HOUSE RESOLUTION 394 of 2003

(Without Appendices)

January, 2006

TO: All Members of the General Assembly

FROM: Representative Scott E. Hutchinson, Chairman
Senator Raphael J. Musto, Vice Chairman

SUBJECT: Report on Oil and Gas Leasing Activities on
Commonwealth-Owned Lands

DATE: January, 2006

Pursuant to House Resolution 394 of 2003 the Joint Legislative Air and Water Pollution Control and Conservation Committee submits the report regarding Pennsylvania's Department of Conservation and Natural Resources (Department) oil and gas leasing activities on Commonwealth-owned lands.

The report is the result of ongoing meetings and discussions with the Department, and the recommendations adopted in this report are presented to the General Assembly for consideration.

COMMITTEE MEMBERS

2005-2006 Session

Rep. Bob Bastian
Rep. Camille George
Rep. Richard Grucela
Rep. Julie Harhart
Rep. Scott E. Hutchinson, Chairman
Rep. Scott A. Petri
Rep. Thomas C. Petrone
Rep. Greg Vitali

Senator James Ferlo
Senator John R. Gordner
Senator Richard A. Kasunic
Senator Roger A. Madigan
Senator Raphael J. Musto
Vice Chairman
Senator Mary Jo White
Senator Robert C. Wonderling
Senator John Wozniak

COMMITTEE STAFF

Craig D. Brooks, Executive Director
Tony M. Guerrieri, Research Analyst
Geoff MacLaughlin, Communications Specialist
Lynn L. Mash, Administrative Officer

INTRODUCTION

The General Assembly adopted House Resolution 394, Printers Number 2595, (Appendix A) in response to a policy proposed by the Department of Conservation and Natural Resources (DCNR) in its draft final State Forest Resource Management Plan (SFRMP) that would have terminated all future leasing of shallow natural gas reserves beneath Commonwealth-owned lands. By the resolution, the General Assembly directed the Joint Legislative Air and Water Pollution Control and Conservation Committee (Committee) to undertake a study of DCNR's oil and gas leasing activities that would:

1. assess the economic and environmental benefits and costs of oil and gas exploration and development carried out on Commonwealth-owned land;
2. determine the reasons underlying the draft final SFRMP policy of terminating all future shallow natural gas leasing on the forest lands under the jurisdiction of DCNR;
3. evaluate the terms, conditions, restrictions, fees and management provisions in DCNR's 2002 standard oil and gas lease to determine whether and how the Commonwealth might promote or impede robust competition for oil and gas leases of State Forest lands for natural gas exploration and development and ensure protection of the environment;
4. catalog the conservation, recreation, dam and flood control and other projects carried out by DCNR with the funds available to it from the Oil and Gas Lease Fund; and,
5. provide recommendations to the General Assembly, including any necessary legislation, based on the findings of its investigations.

Through H.R. 394, the General Assembly also urged DCNR to postpone adoption of a final policy regarding future shallow natural gas leasing of Commonwealth-owned lands under its jurisdiction until after it receives the Committee's report and considers the findings and recommendations of the report.

RECOMMENDATIONS

- 1. DCNR should retain the proposed ban on new oil and gas well sites and roads in bioreserve areas, old growth areas and wild and natural areas; and allow only limited use along steep slopes and high recreation impact areas (as under existing lease), including buffer zones appropriate to those areas. DCNR should, however, continue to grant waivers in buffer areas where greater environmental benefits occur.**
- 2. DCNR should replace the proposed policy which would adopt a blanket ban on new gas well development in shallow geologic formations**

- with a policy that would accommodate natural gas exploration and production in all available geological horizons beneath State Forest lands under certain controlled circumstances established in the lease.**
- 3. DCNR should adopt a lease structure that provides economic viability for gas production while ensuring protection of the state's forest reserves. More specifically, the lease should reflect the Department of Environmental Protection's (DEP) rules and regulations as closely as possible and ensure the confidentiality of proprietary information contained in a lease.**
 - 4. In an effort to facilitate broad-based participation in the lease bidding process, DCNR should adopt a modified bonus and fee structure that reflects nationwide industry norms.**

NATURAL GAS LEASING ON COMMONWEALTH-OWNED LANDS

DCNR's Bureau of Forestry is responsible for the management of approximately 2.1 million acres of State Forest land. The Bureau of Forestry endorses the concept of multiple resource management of publicly owned lands under its management. Using sound ecosystem management policies and practices, the Bureau of Forestry strives to retain the State Forest's wild character and maintain its biological diversity while providing recreational opportunities, sustained yields of quality timber, and environmentally sound utilization of mineral resources.

All mineral operations that involve DCNR-owned lands are conducted in accordance with sound conservation practices. Exploration and development of mineral resources on state lands are conducted in a manner which is fully compatible with other uses and values including timber, wildlife, forests, recreation, and water resource management.

Committed to sound ecosystem management practices, the Bureau of Forestry is working to retain the State Forests' character and biological diversity while providing pure water, recreational opportunities and environmentally sound utilization of mineral resources.

The exploration of natural gas reserves beneath State Forest lands serves the citizens of the Commonwealth in two important ways:

- Leasing natural gas reserves under state-owned lands provides a source of clean, indigenous natural gas that would otherwise be unavailable to supplement the energy needs of Pennsylvania consumers; and,

- The revenues generated to DCNR from natural gas leasing rentals and royalties provide funds that would otherwise be unavailable to purchase state park and forest lands, and to maintain existing park and forest infrastructure and assets. The Oil and Gas Fund, which derives its revenue from leases on State Forest lands, generates between \$3 million and \$4 million annually for the purchase of such lands.

The Bureau of Forestry has endorsed the concept of multiple resource management of publicly owned lands under its management. The development of natural gas resources provides the opportunity to capitalize on clean energy provided by natural gas and coincides with an energy policy that endorses energy conservation.

HISTORY OF NATURAL GAS LEASING ON STATE FOREST LANDS

Since the Commonwealth started leasing its reserves for development in 1945, DCNR has held 70 oil and gas lease sales and has issued leases from those sales for more than 800 tracts of State Forest land. More than 1,300 natural gas wells have been drilled on DCNR leases since development of the resource began in 1947. (Appendix B.)

The Minerals Section in the Bureau of Forestry administers the leasing process. Oil and gas companies evaluate the mineral prospects beneath state-owned forest land and nominate acreage that they would like to lease for oil or natural gas development to DCNR. After receiving nominations, the Bureau of Forestry and DCNR management analyze the compatibility of proposed natural gas development with other uses and values on and near the nominated State Forest land. If the use is acceptable and the nomination is approved, the Minerals Section prepares tract maps and bid notices for the nominated lands. DCNR then advertises the proposed lease sale in local newspapers in the areas of the nominated lands to give interested oil and gas companies an opportunity to bid competitively for the acreage. The highest responsible bidders may then be issued oil and gas lease contracts.

Successful bidders must agree to the terms of DCNR's Oil and Gas Lease for State Forest and Park Lands, which is a legally binding contract that gives the lessee the opportunity to explore, drill, produce, and sell natural gas found within the lands specified in the lease agreement.

The Oil and Gas Lease Sale Historical Activity Summary (Appendix C-1) shows the leasing trend since 1969, the year that DCNR began to open shallow natural gas lease prospects on its lands for bid.

The development of natural gas reserves beneath State Forest lands started with the opening of the deep Oriskany formations in the Leidy, Greenlick, Tamarack and Wharton Benezette fields in 1947. As the natural gas reserves in these short-lived fields were depleted, DCNR began working with gas companies to convert the producing formations into natural gas storage reservoirs. The industry started developing natural gas storage reservoirs in the depleted Oriskany fields in 1965.

After a brief hiatus in industry interest, additional natural gas development started in the mid-1970's with the leasing of the shallow natural gas reserves in the Council Run, Gifford Run and Grugan natural gas fields. Development of the shallow natural gas reserves was stimulated by a variety of energy and tax policy initiatives that were enacted into law in the wake of the Arab oil embargo and ensuing energy crisis of the early 1970's.

Interest in leasing shallow gas reserves on state-owned land gradually diminished through the 1980's as the economics of the oil and gas industry faded. By 1992, the industry entered a severe depression, and interest in further leasing virtually disappeared.

By the turn of the century, DCNR decided to pursue new leasing opportunities in response to significant natural gas discoveries in New York and West Virginia in the very deep Trenton-Black River geological trend.

The Trenton and Black River geological formations are middle Ordovician in age (approximately 450 million years old) and consist of dense limestone that contain porous dolomite zones where natural gas is believed to have accumulated. In Pennsylvania, the Trenton-Black River zone will most likely be found at depths of 12,000 to 14,000 feet.

Oil and gas companies that had been developing the Trenton Black River prospect in New York and West Virginia began approaching DCNR and making nominations of acreage to explore for new natural gas production opportunities. DCNR responded in 2002 with the announcement of a lease auction of the subsurface rights beneath 218,210 acres of State Forest land in the Susquehannock, Tioga, Elk, Tiadaghton, Sproul, Moshannon, Rothrock, and Forbes State Forests. The auction led to the leasing of oil and gas rights beneath 51,203 acres in Fayette, Potter and Cameron counties.

As of December 31, 2005, the total acreage under lease for primary oil and gas extraction, and gas storage activity, is 242,442 acres, which is approximately 11.6 percent of the entire State Forest system of 2,082,700 acres currently under the Bureau of Forestry's management at the end of 2005. The year 2005 ranks 32nd in the annual acreage under lease over the 58 year program. The average annual acreage under lease over the 58 years of the program is 303,096 acres. The greatest amount of acres under lease in any one year was 996,558 acres in 1984. The least amount of acres under lease in any one year was 6,612 acres in 1947.

BENEFITS TO THE COMMONWEALTH

Since 1947, DCNR lessees have produced more than 380 billion cubic feet of natural gas from State Forest lands. Such production is sufficient to satisfy the energy needs of more than 63,000 households every year since production started.

In addition to delivering clean energy to Pennsylvanians and other consumers throughout the Northeast United States, DCNR's leasing activities provide tremendous conservation benefits to the Commonwealth through the land rentals and royalty payments the Commonwealth earns from its natural gas leasing activities.

The Oil and Gas Lease Fund was established by Act 256 of 1955 to give DCNR the exclusive right to use rents and royalties from its natural gas leasing activities to finance conservation, recreation, dam and flood control projects that are not otherwise funded by appropriations from the General Fund.

Rental payments are made by the lessee for the privilege of holding acreage under lease. When wells are drilled and production begins, the lessee's rental payments are offset by royalties on the well price of the natural gas volumes being sold to market. The standard oil and gas royalty payment is one-eighth of the wellhead value of the natural gas. Acreage that is leased by DCNR for natural gas storage only pays an annual rent on the acreage, because no indigenous natural gas is produced from the land.

Total income to the Commonwealth from natural gas and gas storage rentals and royalties has exceeded \$140 million since 1955. DCNR estimated that the value of the natural gas-related income to the State, after correcting for inflation, equates to a present value of \$280 million. The Oil and Gas Lease Fund Historical Income Stream (Appendix D-1 and D-2) shows the trend in natural gas leasing activity and income since 1947.

Act 256 requires that DCNR use revenues accumulated in the Oil and Gas Lease Fund for conservation, recreation and dams or flood control projects, or to match federal grants for such purposes. Since 1955, perhaps the most significant

benefit of the fund has been the use of its income to purchase the acreage needed to create eight State Parks and to supplement and expand 31 other State Parks. (Appendix E.)

STATE FOREST RESOURCE MANAGEMENT PLAN

The State Forest System was first established in 1898 for the purpose of providing a continuous supply of wood products, protecting watersheds, and providing opportunities for outdoor recreation. Over the last century, additional lands have been acquired, and today the State Forest covers over 2.1 million acres and accounts for 12 percent of the forested area in the Commonwealth. The Bureau of Forestry is charged with managing the State Forest System.

Since 1955, State Forest management has been guided by written management plans that were revised at 15-year intervals. In response to dramatic increases in recreational activities in State Forests over the last decade, the Bureau of Forestry initiated a strategic planning effort to ensure the long-term sustainability of the State Forest. The effort culminated in 1995 with a strategic plan, *Penn's Woods – Sustaining Our Forests*, that adopted a commitment to managing the State Forest using the principles of ecosystem management.

Subsequent to the adoption of the strategic plan, Scientific Certification Systems (SCS) conducted a third-party review of the Bureau's State Forest operations using forest management principles established by the Forest Stewardship Council. The review resulted in a formal "certification" by SCS in 1998 that the State Forest System is "well managed." The formal certification was accompanied by a Forest Certification Report.

Understanding the relationships among forest structure, management activities, and ecological responses is central to wise management of the forest systems, and in order to manage the forests effectively, DCNR has relied on the use of the best science, technology and information available to guide their decision making processes. DCNR has had the difficult task of planning the management of one of the nation's most abundant public hardwood forests. In recent years, the focus of forest management on public lands has shifted from timber management to an emphasis on multiple use management policies. In 1998, the Bureau of Forestry conducted 27 public meetings to assess public interest in the management of State Forest lands, and based on the public input, it prepared a new draft forest management plan that was released for a round of public comment in 2000.

The most significant changes in forest policy were made in 2003 when the Bureau of Forestry unveiled the new SFRMP for the 2.1 million acres of forest it regulates in 20 districts in 48 Pennsylvania counties. The plan was revised in re-

sponse to public input and comments, and evolved into an ecosystem management approach. This approach is an attempt to accommodate human resource needs and critical ecosystem functions while maintaining native biodiversity.

The 450-page SFRMP sets management guidelines that attempt to establish sustainable forestry goals and recognize that State Forests are intended for multiple uses including timber supply, mineral extraction, recreation, watershed protection and wilderness preservation. For the first time, however, the new SFRMP proposed to adopt a new policy that would prohibit future leasing of State Forest lands for the exploration and development of shallow natural gas reserves. The plan contains no rationale for this major policy change, and DCNR offered no prior warning that the policy change would be included in the final plan, even though it has held 42 public meetings on the plan over five years.

The prohibition on future shallow gas leasing took the form of new provisions in the 2002 DCNR Standard Oil and Gas Lease that established minimum 640-acre (one square mile) spacing between gas wells. The lease also included a waiver provision to consider the development of new shallow gas discoveries that would require denser well spacing, but DCNR indicated that the likelihood that waivers would be granted was low, given the high level of opposition to waivers by a number of environmental groups.

The SFRMP provided for the continued operation and management of existing shallow gas leases, for future leasing to allow for exploration and potential development of deep gas reserves, and for the continuation of the gas storage program. The draft plan also called for strengthened oil and gas lease guidelines.

DCNR solicited comments from the public on the draft final plan over the next few months. Commentator opinions on the issue of resource extraction from State Forest lands ranged generally across a broad continuum with opponents arguing that resource extraction should be considered an incompatible use of the State Forest. Supporters endorsed the activity as a sustainable industrial economic activity that helps DCNR fulfill its forest management mandate.

With regard to the prohibition on shallow gas leasing, proponents of the restriction cited potentially negative environmental impacts such as forest fragmentation. They also asserted that natural gas development has negative impacts to other uses of the State Forest such as recreation. Those opposed to the restriction stressed the state and local economic benefits of the gas leasing program and suggested that the related environmental impacts were relatively insignificant and possibly beneficial. They also felt that the program was compatible or even beneficial to many other uses of the State Forest.

In its response to comments, DCNR decided to table, for additional evaluation, its proposal to discontinue new leasing of State Forest lands for exploration and development of shallow natural gas. DCNR's evaluation has included further internal review, an assessment of the recommendations from House Resolution 394 and consideration of the recommendations from its Ecosystem Management Advisory Committee (EMAC). DCNR has committed to working with all stakeholder groups on the issue to develop an oil and gas leasing policy that balances the Commonwealth's need for energy resources with other forest and environmental values.

OIL AND GAS LEASES

Trenton-Black River Lease Auction

Concurrent with its effort to revise the SFRMP, DCNR initiated a first-ever auction of leases for substantial acreage of State Forest land to take advantage of growing industry interest in the potential natural gas reserves in the Trenton-Black River geological formation. In the auction, DCNR offered for lease the subsurface rights beneath nearly 500,000 acres of State Forest land in the Susquehannock, Tioga, Elk, Tiadaghton, Sproul, Moshannon, Rothrock, and Forbes State Forests.

Exploration for natural gas in Pennsylvania's Trenton-Black River formation is a new development in the oil and gas industry spurred by significant gas discoveries in West Virginia and New York. The formations consist principally of dense and dolomitized limestone at depths of 12,000 to 14,000 feet in Pennsylvania.

Prior to announcing the lease auction, DCNR revised its gas lease to include additional restrictions on the lessee to protect the environment from activities associated with the drilling of deep gas wells. Among the new requirements put in the lease, DCNR added provisions that:

- increased minimum well spacing from one well in 40 acres to one well for each 640 acres to reduce forest fragmentation;
- prohibited all surface activity of any kind, including drilling and construction of well sites, roads and pipelines on a State Park or State Forest wild or natural area;
- prohibited drilling within 660 feet of the boundary of State Park or State Forest wild or natural areas;
- required companies to secure a \$25,000 lease bond as well as a well plugging bond for each well ranging from \$5,000 to \$100,000 at a minimum, depending on the depth of the well.

- required a \$20 million Drilling-Well Control Insurance Policy for wells anticipated to reach 10,000 feet or deeper; and,
- required DCNR District Forester approval of the locations of all drilling sites, access roads and transmission lines.

The foregoing provisions were added to supplement a number of substantial revisions that had been made by DCNR over the course of the last decade.

The proposed lease auction created substantial controversy and DCNR postponed the auction. DCNR held six information sessions across Pennsylvania between May and June of 2002 to allow for public review and comment on their natural-gas leasing proposal.

In response to comments from conservation and environmental organizations, DCNR reduced the amount of acreage that it would put up for bid by more than 50 percent to 218,000 acres over 75 tracts in four counties.

DCNR also made a number of additional changes to its lease for the Trenton-Black River auction to address public concerns. It revised the lease to indicate that:

- no surface activity of any kind would be permitted on State Park lands or State Forest wild and natural areas, including seismic exploration, pipelines or road construction;
- no waivers of the surface activity prohibition would be granted;
- buffers around Exceptional Value streams were tripled from 100 to 300 feet and doubled on all other streams to 200 feet;
- waivers for well spacing and buffer restrictions would only be granted where the District Forester determined that the environmental impact was minimized or where there was the potential for a net improvement in environmental quality; and,
- lessees would be required to utilize fully shielded lighting consistent with Occupational Safety & Health Administration regulations to reduce night lighting pollution during well drilling and production operations.

The environmental restrictions and financial guarantees built into the DCNR lease to address specific concerns are supplemented by DEP regulations in 25 Pennsylvania Code Chapters 78, 92, 93, 102, and 105 that establish various permits and authorizations that the lessee must obtain from DEP. In most cases, the supplemental restrictions included in the DCNR lease exceed comparable regulatory restrictions and requirements in DEP regulations.

During the comment period on the auction proposal, DCNR also received comments from the oil and gas exploration and production industry. The industry was concerned with four broad issues that relate to DCNR lease documents and bid requirements. At issue were the following four specific concerns with regard to the leasing documents and bidding process. They are:

- the inconsistency of many lease provisions with DEP rules and regulations;
- the failure of the lease to facilitate the planning and decision-making process to ensure timely, economical and environmentally sound development of the leased acreage;
- the failure of the lease to protect confidential business information; and,
- the lease costs.

The Pennsylvania Oil and Gas Association (Association) submitted extensive comments and suggestions seeking changes to the gas lease to help ensure a successful lease auction and to facilitate the development of the leased acreage to the best advantage of DCNR.

The Association's comments were developed by oil and gas companies that advocated changes designed to maximize producer participation in the auction, to get the best possible bids on the acreage for DCNR, to establish management procedures that allow for the efficient development of the resource, and to ensure that DCNR's stewardship responsibilities over state-owned resources were fully satisfied.

Industry groups were concerned that without substantial reform of the lease, the auction would hinder industry participation and interest because it would only appeal to companies that would bid on highly targeted parcels where the seismic information was already available and a specific geological target had been identified. As written, industry argued, the lease would subvert truly competitive bidding on the large acreage positions that the auction was meant to facilitate.

In response to industry concerns, DCNR included several modifications to the lease to provide confidentiality of seismic data and limited confidentiality of other lessee business information and well data, and to clarify and reconcile certain safety requirements.

After limiting the acreage available for lease, strengthening the environmental protection elements of the lease, and offering only a few changes to address the procedural and business concerns raised by industry, DCNR conducted a day-long auction in August of 2002.

DCNR successfully auctioned 23 percent of the acreage offered which is in line with historical acreage statistics (Appendix C-2). Two companies were awarded leases for rights to a total of 51,203 acres in 17 tracts in Fayette, Potter and Cameron counties. A West Virginia-based company was awarded a 549 acre tract in Fayette County; a Texas-based company was awarded the remaining acreage in Potter and Cameron counties. The auction generated competition between the Texas company and a New York-based bidder for only one tract of land.

The total of the high bonus bids was \$1,550,062 which ranks as the 11th highest lease sale income result in the 50 year history of the program. There have been 57 lease sales in the 58 years of the program, placing the 2002 result in the upper 20 percent of the lease sale income events. Participation was not as competitive as anticipated, however, it was recognized that the lease structure and terms may have had an effect on participation.

DCNR POLICY AND COMMITTEE RECOMMENDATIONS

Regarding the four Committee recommendations, DCNR has been meeting with the Gas Industry Work Group (GIWG) for the last two years in order to work out possible changes to DCNR's standard oil & gas lease agreement that might reduce operational and access problems on State Forest lands for existing and potential oil and gas operators. GIWG has addressed all the issues detailed in the four recommendations and DCNR has agreed to changes in its oil & gas lease language that appear to be acceptable to both the GIWG and DCNR. The following is a summary of the recommendations and the changes that have been agreed to by GIWG and supported by this Committee:

1. DCNR will maintain its long-standing ban on all drilling and production activity on Wild Areas, Natural Areas and in State Parks. The lease has language to govern activity in recreational areas and areas specifically with steep slopes (*these are operational issues unique to each Forest District*). Waivers are still possible for buffer areas under specific circumstances where the operator for the contemplated operation can demonstrate greater environmental benefit to DCNR.
2. The blanket ban of shallow gas well drilling has been replaced with provisions in the lease that are designed to accommodate natural gas exploration and production in all available geological horizons underlying the State Forest system. Industry may nominate tracts of land in the State Forest system from time to time, indicating to DCNR the target depths of the geological horizons it wishes to explore. DCNR will evaluate the nominations for appropriateness given the location of the tracts in the State Forest system. If found appropriate, DCNR will allow the nominated tracts to go to lease

- sale with a stipulation in the lease indicating that drilling will be permitted for development of the target geological horizons under certain controlled circumstances, if commercial gas is discovered.
3. The previous lease agreement terms for the royalty rate have not been changed. The royalty rate continues to be set at 12.5 percent, provided for by law in Pennsylvania. The rental rate during the primary term of the lease has been reset to \$5.00 per acre per year. Both of the above rates are fair and equitable to the Commonwealth and the operator and have been agreed to by the GIWG and DCNR.
 4. New language to ensure the confidentiality of the operator's data, but at the same time giving free access to the data for DCNR's technical staff for possible analysis, has been agreed to by GIWG and DCNR.
 5. A new section, referred to as Dispute Resolution, has been added. This section should enhance the operator's ability to resolve field operational disputes in a timely manner.
 6. Currently DCNR has approximately 500 wells under production on State Forest lands. Although discussions have taken place about establishing an absolute ceiling for the number of wells that would be allowed on State Forest lands at one time, no limitation has been recommended or adopted by the GIWG. All parties recognize that the amount of State Forest lands directly affected by the well locations is small in comparison to other activities allowed in the State Forest. Approximately 500 to 1,000 acres of State Forest lands are directly involved in support of the approximate 500 wells. An absolute ceiling may call into question other activities such as recreation by motor vehicles which is permitted on thousands of State Forest acres, and timber harvesting where approximately 16,228 acres of State Forest would be affected. Both of these activities affect much larger amounts of State Forest lands on an annual basis than oil and gas extraction activity. In addition, the geology and reservoir conditions of the oil and gas accumulation determine the necessary surface development to economically recover the hydrocarbons, so setting a predetermined blind limit can actually act as a major impediment to future development of existing leases and possible future lease sale offerings.
 7. DCNR has an annual per acre rental rate set at \$5.00 per acre, as described above. The rate in the Appalachian basin ranges from \$2.00 to \$10.00 per acre for annual rentals. DCNR has set its royalty rate at 12.5 percent, which is the minimum allowed by law in Pennsylvania. The royalty rate in Pennsylvania is variable, depending on the acreage location to known production, the demand for the acreage and the possible other terms of the agreement. The Pennsylvania Game Commission (PGC) has an average royalty rate on shallow leases of 17 percent and 19 percent for deep leases.

PGC's rates are negotiable because they have the ability to sole-source leases, where DCNR does not have that authority. DCNR may set a minimum bid in \$/acre for any given future lease sale, which will be dictated by the market conditions in the basin at that time. Compared to nearby New York state where bids reached \$300/acre, the 2002 Trenton-Black River lease sale set the minimum at \$30/acre. Royalty rates and rental rates are revisited from time to time to determine if the compensation is appropriate for the going rates in the basin.

CURRENT ACTION REGARDING GIWG AND DCNR'S AGREEMENT TO PROPOSED LEASE REVISIONS

The Bureau of Forestry's Minerals Section has completed revisions to DCNR's standard oil and gas lease agreement to the satisfaction of GIWG and DCNR. The Bureau of Forestry has not objected to any of the revised lease provisions and has allowed the Minerals Section a great deal of latitude to work with GIWG on the possible revisions to the technical issues within the draft proposed lease agreement. The Bureau of Forestry agrees with the changes to the lease agreement that now would allow shallow close-spaced drilling activity on some Bureau managed lands, after internal review upon nomination of the acreage by industry, and it also agrees with the compensation levels to the Commonwealth for oil and gas activity on its lands.

Currently, all proposed changes must be submitted to DCNR's Mineral Section Chief Counsel for legal approvals. Assuming all the changes are accepted and approved, a draft will be forwarded to the Secretary of DCNR and presented before the Conservation & Natural Resource Advisory Counsel (CNRAC), and the EMAC, for discussion. This process may take upwards of six months. Assuming there are no serious objections or controversy from either CNRAC or EMAC members, the Secretary will approve and authorize the Minerals Section to use the new lease as the standard oil and gas lease agreement from that point forward. It is not anticipated that public meetings will be needed. The new standard lease agreement will then be placed on the DCNR website. It is possible for all of the approvals to be obtained and the final document to be ready for use and website display by early 2006.

The Committee has requested that a catalog and written summary of the conservation, recreation, dam and flood control projects carried out by DCNR with regard to the Oil and Gas Leasing Fund be submitted upon completion to the Committee. Assuming all the above happens as outlined, it may be possible for the Minerals Section to consider an oil and gas lease sale for mid to late 2006.