

**Frequently Asked Questions  
on  
Oil and Gas Leasing on Monongahela National Forest System Lands**

Beneath approximately 62% of National Forest System land that comprises the Monongahela National Forest, oil and natural gas are federally owned. Privately owned oil and natural gas rights underlie the approximately 38% of Monongahela National Forest System land.

Below are some frequently asked questions on leasing federally owned oil and natural gas.

**Can oil and natural gas owned by the United States Government under National Forest System lands be made available for lease by private industries or individuals?**

**Yes.** Federally owned oil and natural gas (gas) beneath National Forest System lands may be leased, unless made unavailable through law or regulation. For example, oil and gas beneath congressionally designated wilderness is unavailable for leasing.

**What is the process used to lease these resources?**

The process to lease federal oil and natural gas (gas) is fully described at the following Bureau of Land Management website: <http://www.blm.gov/es/st/en/prog/minerals.1.html>

The process begins with the Bureau of Land Management (BLM) receiving a nomination of, or an “expression of interest” in, federally owned oil and gas rights for lease. The BLM forwards the nomination to the Forest Service requesting its consent to leasing the specific oil and gas lands nominated.

Nominated land is subject to:

- Verifying that oil and gas leasing of the nominated lands has been adequately addressed according to the National Environmental Policy Act (NEPA), and is consistent with the Monongahela National Forest Land and Resource Management Plan (Forest Plan).
- Ensuring that conditions of surface occupancy identified in the Forest Plan are properly included as stipulations in resulting leases.
- Determining that operations and development could be allowed somewhere on each nominated lease area, except where stipulations will prohibit all surface occupancy.

After the Forest Service has provided confirmation to the BLM that the above three conditions have been met and consented to leasing the nominated land, the BLM may include the nominated oil and gas land in a lease sale notice, and sell the oil and gas lease rights on the nominated land in a competitive oral auction.

### **Who can nominate minerals for lease sale?**

Generally, any individual or industry interested in leasing these estates may submit an Expression of Interest to nominate the oil and gas.

### **Who manages the lease sale process?**

The Bureau of Land Management manages the lease sale process as described on the website listed above.

### **How are the National Forest System surface estates impacted by lease development?**

Lease development can impact the Forest's surface estates in a variety of ways. The Monongahela National Forest Land and Resource Management Plan (Forest Plan) sets the standards and guidelines for surface use and occupation should the lessee decide to explore or develop the oil and gas lease area.

Some lease areas will have surface occupancy and be developed by construction of roads and well sites along with well production equipment and pipelines from a completed, producing well.

Some lease areas have been determined by the Forest Plan to have no surface occupancy. In this case and in order for the lease to be developed, well sites, roads, and supporting well equipment would need to be constructed on adjacent lands that allow surface disturbance.

Although oil and gas leases may be issued, oil has never been found in commercial quantities on the Monongahela National Forest, so only natural gas would be expected to be produced from these leases.

For a more detailed description of natural gas exploration and development expected within the Monongahela National Forest, see the Monongahela National Forest, Final Environmental Impact Statement for Forest Plan Revision, September 2006, pages 3-366 through 3-368.

### **What kind of analysis is conducted for these leases?**

The analysis for lease areas is conducted according to the National Environmental Policy Act (NEPA). The analysis done with the revision of the Monongahela National Forest Land and Resource Management Plan (Forest Plan) thoroughly addressed the impacts of oil and gas leasing and development where appropriate across the Forest. The analysis determined that by applying direction and standards found within the Forest Plan, oil and gas leasing and development is a compatible use in the Forest Service multiple use mission and can be carefully managed on the Monongahela National Forest to maintain that compatibility.

### **Where can businesses or individuals find information on oil and gas available for lease?**

A combination of sources is typically used. The Bureau of Land Management (BLM) manages federal lease records. Therefore, to find out what is already leased, one would research the BLM records. Forest lands records contain information about federal ownership of the oil and gas estate beneath National Forest System land. Forest staff can direct interested businesses or individuals to information about any areas legally unavailable for leasing, which would include federally owned oil and gas within Congressionally designated wilderness and areas recommended for wilderness designation by the Secretary of Agriculture.

### **What happens once a party leases a tract of minerals on National Forest System lands and wants to develop that lease?**

The lease or operating rights holder who desires to develop the lease will prepare and file an application for permit to drill (APD) with the Bureau of Land Management (BLM). A component of the APD is a surface use plan of operation which must be reviewed by the Forest Service when use of National Forest System land is proposed. Most often, the party contacts the Forest Service for guidance as to Forest Service standards as they are preparing their plans for surface use.

The appropriate site-specific environmental analysis is completed according to the National Environmental Policy Act (NEPA) on the surface use plan of operation submitted to the Forest Service. The Forest Supervisor's decision on the surface use plan of operation would be to approve or not the surface use as proposed, or approve it after adding conditions that reduce surface impacts associated with the proposal.

### **What kind of restrictions may the lease holder encounter while developing their lease?**

Federal oil and gas lease holders who want to develop their lease must comply with State laws and regulations, federal laws and regulations, and lease terms. Federally owned oil and gas made available for lease in the Monongahela National Forest are managed according to the standards and guidelines set forth in the Monongahela National Forest Land and Resource Management Plan.

These laws, regulations, lease terms and standards and guidelines define the parameters for development and indicate the restrictions that may be imposed upon the developer. These restrictions include, but are not limited to such actions as:

- Where the well site, access roads, and pipelines are to be located, and how they are to be constructed
- Seasonal restrictions on certain aspects of the operation
- Avoiding or mitigating impacts to caves or groundwater contamination

For more examples of oil and gas lease development restrictions, see the Monongahela National Forest Land and Resource Management Plan, pages II-45 through II-47.

**Would a leaseholder be able to drill to explore for and produce Marcellus Formation natural gas (gas) if they had a standard lease for federal oil and gas?**

Yes, provided the plan to drill and produce complies with laws, regulations and lease terms.

**Are there Marcellus Formation natural gas (gas) wells proposed or existing on the Monongahela National Forest?**

As of fall of 2008, there are no gas wells existing or proposed that have the Marcellus Formation as the target gas producing formation on the Monongahela National Forest.

For nearly 50 years, the Oriskany and associated strata have been the target of exploration and are producing natural gas within the Monongahela. The Oriskany and associated strata are deeper than the Marcellus Formation, therefore drilling to look for and produce gas from the Oriskany and associated strata, penetrates the Marcellus Formation. Operators have noted small gas amounts as they have penetrated the Marcellus Formation, but not enough gas to be economically viable.

Horizontal drilling techniques, coupled with hydraulic fracturing, are relatively new techniques used by industry to allow the gas believed to be trapped in Marcellus Formation in the region to be released and flow to the surface.

At this point, the existence of economical quantities of Marcellus Formation gas from a similar geologic setting as is found within the Monongahela National Forest is unknown and the subject of much speculation.

**How would Monongahela National Forest resources be protected from potential impacts from drilling and producing Marcellus Formation gas?**

Federal oil and gas leases contain terms that protect National Forest resources.

Lease rights granted are subject to applicable laws and regulations and lease terms. For example, a lease term included in all federal oil and gas leases requires the leaseholder to take reasonable precautions to conduct operations in a manner that minimizes adverse impacts to land, air, water, cultural, biological, visual, and other resources, and to other land uses or users.

Federal oil and gas leases issued on the Monongahela National Forest have a Special Notification that requires operations under the lease to be consistent with the standards found in the Monongahela National Forest Land and Resource Management Plan (Forest Plan).

Let's look at an example of a potential impact people are concerned about associated with drilling and producing Marcellus Formation gas, and how the federal oil and gas lease would provide the control to avoid or reduce the impact.

People have heard about the potential for impacts to surface water or groundwater from using large volumes of freshwater needed for hydraulic fracturing, and subsequent management and disposal of the water used in the Marcellus Formation horizontal drilling methods.

When an operator proposes to drill and develop a federal oil and gas lease, such as drilling a gas well with the Marcellus Formation as the target, a surface use plan of operation is submitted to the Forest Service for review. The surface use plan of operation would contain the operator's proposal for obtaining freshwater for drilling, including the source location and volume needed, and method for disposal of waste water. The Forest Service would conduct a site-specific environmental analysis on the proposed operating plan. Although using freshwater to drill and disposing of used water is a standard industry practice, the federal oil and gas lease does not include an automatic right to use freshwater or dispose of it. Since Forest Plan standards apply to federal oil and gas leases, the proposed source and volume of water and disposal plan would be analyzed for consistency with the Forest Plan, and effects on Forest resources before a decision would be made to approve the surface use plan of operation. In this example, the analysis would consider the source and volume of freshwater and disposal proposed to be used by drilling and whether or not it would meet Forest Plan direction to maintain surface and groundwater sources to support healthy riparian and aquatic habitats and downstream uses. If the proposed surface use would not be able to comply with Forest Plan direction, alternatives that would, such as obtaining water from larger water bodies, drawing water for drilling over a longer period of time, and hauling waste water to approved disposal facilities, must be considered and could be selected for approval over the operator's proposed plan.