

# APPENDIX D: OIL AND GAS LEASING, EXPLORATION AND OPERATION

## Leasing

Oil and gas leases fall into two basic categories—competitive and noncompetitive. Competitive leases are issued in Known Geologic Structures (KGSs) which are areas known to contain producible oil and gas deposits. Noncompetitive leases are issued for lands outside KGSs and are available as a result of either simultaneous filings or open over-the-counter offers.

KGS land may be offered for competitive leasing based on economic production as ascertained by the Bureau. If this occurs, the BLM then prepares a report as to KGS status, determines whether competitive leasing is in the public interest, and groups tracts into lease parcels. If leasing is recommended, a competitive lease sale is scheduled. The BLM offers the parcels for lease through competitive sealed bids. The adequacy of the high bids tendered is determined by a bid evaluation team composed of representatives from BLM. Each sealed bid must be accompanied by an initial payment of 20% of the bonus offered; the remaining bonus payment must be paid prior to lease issuance.

On noncompetitive leases, the applicant files an offer to lease on lands open to lease in non-KGS areas. If, through adjudication, the lands are available for lease, the BLM District Office or other appropriate surface management agency responds with appropriate land use recommendations and, upon approval, a 10 year lease is issued to the applicant.

Previously leased parcels in non-KGS areas (i.e., simultaneous and noncompetitive filings) are listed monthly as they become available following expiration, cancellation, or termination of the old leases. Once a list of available parcels is approved and advertised, all applications received during the filing period are considered to have been filed simultaneously. An applicant may file only one application per tract, accompanied by a \$75 filing fee and the first year's rental fee. A drawing is held and three applications are drawn for each parcel. A lease is offered on the parcel in the order in which they were drawn (i.e., a winner and two alternatives).

For simultaneous oil and gas parcels that receive no applications, these parcels go into an over-the-counter type of noncompetitive lease class. Any person may lease these parcels over-

the-counter, as long as they meet the basic criteria and must pay the filing fee and the first year's rental.

All leases require rent payment in advance. Rent on leases issued over-the-counter is \$1.00 per acre per year. Leases issued pursuant to a simultaneous filing rent for \$1.00 per acre per year for the first 5 years and \$3.00 per acre per year for each remaining year. For competitive leases, an annual rental of \$2.00 per acre is charged. Upon economic production of oil and gas, the royalty charge varies from 12.5% to 25% value, depending on the production volume. Prior to drilling, the lease holder or designated operator must secure bond to ensure compliance with all terms of the lease. Rent and royalty schedules on competitive leases are described in the lease agreement.

The BLM has responsibility to assure full compliance with the spirit and objectives of the National Environmental Policy Act (NEPA) of 1969, the Federal Land Policy and Management Act (FLPMA) of 1976, other federal environmental legislation, and supporting Executive Orders and regulations concerning oil and gas development.

Duties prior to issuing **either competitive or noncompetitive** leases include application of standard stipulations to cover most items necessary to protect and subsequently rehabilitate the surface resource. Appendix F presents the existing standard BLM stipulations package. This package represents an effort to develop a listing of the most often used mitigating measures. For that reason, the reader should note that Appendix F does not contain a complete listing of mitigating measures. If additional stipulations are required, they are formulated and included prior to lease issuance.

Special lease stipulations limit the lessee's normal enjoyment of the lease. Examples are when portions of the lease cannot be occupied or cannot be used during certain parts of the year for wildlife, watershed, or other reasons or when certain roads cannot be used, etc., or when special situations are evident at the time of lease issuance which will require unique or unusually expensive steps by the lessee. Some special situations could involve extremely unstable formations, extremely high pressure water flows, or identified critical habitat for threatened or endangered species.

After lease issuance and prior to approval of any surface disturbing activities within the area of the lease, a detailed site-specific review and field examination is conducted by BLM and

any additional surface administering agency. From this effort, site-specific requirements are formulated for the protection of the surface resources and subsequent rehabilitation, and imposed upon the lessee prior to approval of the proposed activity (i.e., geophysical work, well drilling). Although BLM has prime responsibility at this point, it must have full concurrence from any other surface managing agency. If differences exist, these are forwarded through various administrative levels and eventually to the Secretary.

## Geophysical Exploration

The regulatory authority for seismic activities is outlined in 43 CFR 3045 (1983). To better understand oil and gas leasing operations, the following discussion describes the operator's and BLM's responsibilities in each phase of the operation:

The geophysical operator has a responsibility to cooperate and coordinate his operation with the District Manager. The operator's responsibilities are to:

1. First, be bonded.
2. File a Notice of Intent to Conduct Oil and Gas Exploration Operations on unleased lands, with maps showing proposed seismic lines.
3. Comply with rules, regulations and District policies.
4. File a Notice of Completion accompanied by appropriate maps.

The BLM District Manager's responsibilities are to:

1. Examine resource values and develop appropriate surface protection and reclamation measures.
2. Conduct compliance inspections.
3. Complete final inspection after the Notice of Completion is filed. The inspection must determine that all instructions were complied with and all rehabilitation practices completed. A 90-day limit for the final inspection and notification of additional work is established by regulation. If further instructions are given to the operator after final inspection, a new 90-day limit is established for the BLM after notification by the operator that the work has been completed.

## Operations

Once a federal lessee or designated operator indicates that he wishes to **drill** on or develop a lease, all proposed drilling operations and related surface disturbance activities must be approved before entry upon the lands involved.

Approval will be in accordance with: (1) lease terms, including **any lease stipulations**, and (2) The appropriate CFR. As of 1984, the requirements that must be approved include the following:

**Application for Permit to Drill.** Prior to drilling (or road construction) on a federal lease, the operator must submit an Application for Permit to Drill (APD). The APD includes a **drilling plan and a surface use and operations plan. Where private surface is involved, a written agreement between the lessee/operator and the surface owner or a statement that no agreement could be obtained is necessary.** Where private surface is involved, it should include a copy of the written agreement between the lessee or operator and the surface owner. A letter from the lessee or operator setting forth rehabilitation requirements agreed to with the surface owner is acceptable.

The APD provides **engineering information on the drilling proposal and geologic proposal information. This includes the steps taken to protect underground water geologic formations when necessary and reduce hazards.** The Surface-Use and Operations Plan must allow assessment of the environmental effects expected from the proposed project. Bonding coverage must be obtained by the applicant before approval of the APD by BLM, **only if federal surface may be affected.**

BLM prepares surface-protection stipulations for the approved permit. The BLM must decide at this time if it desires to obtain the well as a water well if oil or gas is not encountered in usable quantities.

**Approval of Additional Operations.** Before repairing, deepening, or conditioning an existing well, a detailed written work plan must be submitted to BLM.

In existing fields, operators are required to submit, for BLM approval, plans for new construction, reconstruction, or alteration of existing facilities when additional surface disturbance will result.

**Abandonment.** Well Abandonment requires prior approval by the BLM, which may require additional surface rehabilitation. These requirements are normally part of the approved abandonment plan. Abandonment will not be approved until surface rehabilitation work required by the drilling permit or abandonment notice is complete, and required vegetation is established to the satisfaction of the BLM District Manager.

**Water Well Conversion.** If the BLM decides to acquire the well as a water well, it must assume responsibility at the time of abandonment. The operator will plug the well at the bottom of the desired fresh-water zone and leave casing in place. The operator then will begin surface clean-up as required. The BLM must reimburse the operator for all costs in excess of the normal plugging costs.

Important resource values will be protected from undue degradation caused by oil and gas exploration and development. However, it is impractical to mitigate impacts on a site-by-site basis in the RMP due to the geographic scope of this assessment. Consequently, many of the mitigating measures in the Programmatic Environmental Assessment will not apply to all sites. Instead, these measures apply to those areas exhibiting environmental features that are Sensitive or Critically Sensitive to oil and gas activity (e.g. fragile soils, endangered species, etc.). **All new leases in areas classified by the Resource Areas as nonsensitive will be issued by the Montana State Office with only Standard Stipulations attached.** Additional stipulations to minimize damage from development will be added to land areas classified as sensitive.

Current sensitive or special stipulation areas include: Fort Meade Recreation Area, Belle Fourche Reservoir, Belle Fourche Airport, and Missouri River Area. These areas encompass about 7,000 acres of federal surface oil or minerals.

**Specialists** attach mitigation requirements to individual drilling permits at the time of the predrill inspection by utilizing the range of measures proposed in the Programmatic EA necessary to protect the features found in the area.

Stipulations for normal environmental situations such as access road location, design, and construction; construction materials; drill site and development facilities layout and construction; waste disposal; water supply; and protection or recovery of cultural resources; protec-

tion of ground and surface water; proper engineering techniques; visual resource considerations; steps necessary for quick and successful reclamation, wildlife habitat protection, facility location, required soil or water testing; etc., will be covered during the lease development stage in the Application for Permit to Drill (APD) required by Operating Order No.

Methods of seedbed preparation and seed mixtures can be left open until the time the actual rehabilitation operation is begun. However, where special species such as hard to find native seed, special seedings, or tree or shrub planting are anticipated, it should be stipulated at the time of approval of the Application for Permit to Drill.

The Programmatic Oil and Gas EA is used as a general guide. The need for using special stipulations must be supported by site specific analysis. This documentation will be included in the lease file.