## MINERALS

#### **A VISION**

The Forest contributes to the nations demand for minerals by encouraging responsible mineral development.

This looks into the future, although some of it may be happening now. It is stated in the "present tense" as if it is already that way. This gives a feel of where we are heading. It paints a general picture with a broad brush.

#### MANAGEMENT HIGHLIGHTS

Administer the mineral laws and regulations to minimize surface resource impacts while supporting sound energy and minerals exploration and development.

This snaps a more detailed picture. It gives a feel of the intent, purpose and goals. It is the framework for the standards and guidelines.

### Setting The Stage

The process by which a piece of land became National Forest and the type of mineral - solid or fluid - determines which laws or regulations apply in a particular case. Various laws define the principal categories of minerals - locatable, leaseable, common variety. Specific types of minerals can fall into multiple categories depending on the land status, i.e., how the land became national forest.

On land which belonged to the federal government before the area was designated as a National Forest, the 1872 Mining Law applies. This Law confers a statutory right on claimants to pursue development of "locatable" minerals. Under this law, the Forest Service role is to help the claimant find an acceptable way to develop their interest.

For national forest land which was obtained by donation or purchase, generally called "acquired" land, the Forest Service has a broader spectrum in which to mitigate environmental impacts. Although policy encourages mineral development, a proposal which can't be adequately mitigated can be disapproved on "acquired" land.

When land became part of the national forest through exchange, the status of the land leaving government ownership in the exchange determines which laws apply.

#### Standards And Guidelines

**ADMINISTER OIL & GAS CASES...** In addition to appropriate laws and regulations, use Memoradums of Understanding that have been developed between the Forest Service and the BLM to guide case processing.

**SURFACE OCCUPANCY RESTRICTIONS...** For proposed oil and gas leases, include additional stipulations for the protection of surface resources in the following categories: slopes over 40% (507.1 M Acres),

#### C. Forest-wide Prescriptions

to riparian areas (33.6 M Acres), critical wildlife habitats, and developed and proposed recreation sites (9.3 M acres). When possible, classify these areas as available for leasing but with "limited surface occupancy". Develop site specific "limits" if needed. These should describe such requirements as restrictions on periods of permissable activity, access control, etc. If necessary, classify as "no surface occupancy." Use the same categories to develop appropriate mitigation measures or restrictions for all other mineral development proposals.

**PITS...** Administer and process mineral material cases. Complete pit development plans for all operating pits that address sound development and reclamation procedures. Top soil will be stockpiled. Pit bottoms will be graded to drain and slopes shall be reshaped to 3:1 where practical.

**VALIDITY CONTESTS...** Initiate validity contests on mining claims where there is unwarranted occupancy, detrimental surface disturbance, or the lands are needed for another National Forest program.

**OPERATING PLANS...** Require operating plans for mining claims when significant surface disturbance or occupancy is proposed.

WITHDRAWALS OF LANDS TO THE PROVISIONS OF THE 1872 MINING LAW... Withdraw from mineral entry such important areas as recreation facilities, designated recreation sites, etc.

# Standards and Guidelines (Amendment 13)

**GENERAL ADMINISTRATION FOR GAS DEVELOPMENT...** Minimize surface disturbance on the Jicarilla Ranger District. Where feasible, encourage the use of unconventional drilling techniques, such as directional drilling, and well siting measures, such as co-location and twinning, to minimize impacts to surface resources. Encourage the use of existing well pads, roads, and pipeline corridors for new facilities. Same for new and existing leases.

**BEST MANAGEMENT PRACTICES...** Utilize established best management practices found in the most current version of the "Oil and Gas Surface Operating Standards for Oil and Gas Development" (Gold Book). Same for new and existing leases.

**AREAS OF RESOURCE CONCERN...** The following areas (with resource values) are identified as areas of resource concern:

- o Bancos Canyon (cultural resources, watershed, wildlife habitat, and seclusion)
- La Jara Canyon (undeveloped characteristics, cultural resources, wildlife security, seclusion)
- Valencia Canyon (undeveloped characteristics, cultural resources, wildlife security, seclusion)
- Fierro Mesa and Canyon (undeveloped characteristics)
- Vaqueros Canyon (visual resources, wildlife habitat)

Within these areas, apply current forest plan direction for Management Areas 4, 7, 8, 12, and 13 and manage for protecting, maintaining, and enhancing the resource values for which they are identified.

Prior to developing any new well sites, associated roads, and pipelines within an area of resource concern, consider alternative drilling technology and various site locations to minimize the impacts to surface resources. A 5-year development strategy will be encouraged prior to proposed development in areas of resource concern. Applies to existing leases.

- TIMING RESTRICTION: New drilling activity and completions is limited to April 1 through October 31. Normal recurring production and day-to-day operations will continue to occur year-round. Exceptions may be considered on a case-by-case basis. Applies as a condition of approval on existing leases to be negotiated with the operator. This limitation does not apply to maintenance and operation of producing wells.
- RIPARIAN AREAS: Exclude well pad construction in riparian areas. Same for new and
  existing leases. If there are no other options other than to construct a well pad within a riparian
  area, additional NEPA analysis to approve a surface use plan of operations will be required
  and a site-specific amendment to the forest plan would be required.
- **SLOPES OVER 20 PERCENT:** When possible, exclude well pad construction on slopes greater than 20 percent, with cuts over 15 feet. Same for new and existing leases.

#### C. Forest-wide Prescriptions

- SLOPES OVER 40 PERCENT: Avoid new roads crossing slopes greater than 40 percent. Require an engineering design approved by the Forest Service to support road construction on slopes greater than 40 percent. Same for new and existing leases.
- MAXIMUM ROAD GRADES: Limit maximum grades to 8 percent for new roads, unless
  pitches are less than 300 feet (up to 10 percent permitted in some cases). Same for existing
  and new leases.
- PIPELINES: Locate pipelines to minimize surface disturbance, such as aligning along existing
  roads and corridors. Also minimize surface disturbance by putting pipes deep enough to allow
  other surface uses to occur on top of these lines. Same for new and existing leases.
- NATURAL GAS COLLECTION POINTS AND PIPELINES: Encourage centralization collection points and water pipelines for produced water. Same for new and existing leases.
- NEW LEASE ROADS: Close all new lease roads over 300 feet in length to public motorized access, except where other resource needs dictate that a road should be left open to the public. Same for new and existing leases.
- LOOP ROADS: Permit loop roads to access leases in cases only where a transportation proposal developed by the operator and approved by the Forest Service demonstrates that there would be a benefit to surface resources. Same for new and existing leases.
- RESTORATION AND RECLAMATION: Complete restoration and reclamation of surface
  disturbance to achieve 70 percent of the ground cover (compared to nearby undisturbed
  areas) with permanent native vegetation within 3 growing seasons. Bare ground necessary to
  conduct day-to-day operations must be kept to a minimum. Monitor the success of ground
  cover establishment until 70 percent of the ground cover is attained. Reclamation meeting the
  same standard is required for redisturbance of revegetated areas. Same for new and existing
  leases.
- RECLAIMED AREAS: Monitor and maintain reclaimed areas to minimize the establishment of invasive plants during the reclamation period. Same for new and existing leases.
- VISUAL QUALITY WITHIN VAQUEROS CANYON: Manage Vaqueros Canyon for a visual quality objective (VQO) or scenic integrity level of partial retention. This objective may be reduced by one level to meet other resource goals on a case-by-case basis. Employ design criteria for visual elements that adhere to the natural characteristics dominating the landscape to the extent possible.
- AIR QUALITY MITIGATION: All newly developed facilities will utilize the air quality mitigation as set forth by the New Mexico Air Quality Bureau. When existing facilities are updated, industry will also follow these mitigation measures. Same for new and existing leases.
- NOISE: Comply with BLM's management of sound generated by oil and gas production and transportation in the San Juan Basin described in the "Notice to Lessees and Operators on Onshore Oil and Gas Leases within the Jurisdiction of the Farmington Field Office". As changes occur over time, the Forest Service will continue to adopt the BLM standards as they develop. Same for new and existing leases. Current standards include, but are not limited to:

- 48.6 dB(A)Leq will be achieved at Buzzard Park and Cedar Springs Campgrounds, Gasbuggy, and Carracas Mesa Administrative Site.
- 48.6 dB(A)Leq will be achieved inside Middle Mesa Raptor Area, Ullbarri Raptor Area, and Munoz Canyon Raptor Area at 400 feet in all directions from the noise source.
- Stricter noise standards may be applied to Gasbuggy, Buzzard Park and Cedar Springs Campgrounds, if warranted.
- Additional noise sensitive areas, such as primary winter big game range or new camping, picnic, or trail areas, may be identified and/or developed by the Forest Service.
   Any new policy would be implemented after a 30-day notice to the affected parties.

#### LEASING ON THE JICARILLA RANGER DISTRICT:

The following stipulations apply to new leases, including those pending, currently unleased, and any existing leases that become available for leasing in the future:

- NO SURFACE OCCUPANCY (NSO): leasing with a no surface occupancy stipulation makes energy resources available for companies willing to employ unconventional drilling technology. Extraction of these energy resources without roads or well pads within the areas listed below allow the Forest Service to pursue the management objectives of protecting undeveloped characteristics, cultural resources, wildlife habitat, and seclusion. On the Jicarilla Ranger District, a NSO stipulation will be applied to new leases in: Bancos, La Jara, and Fierro Canyons, Valencia Canyon beyond 300 feet from existing roads, and in Mexican Spotted Owl habitat.
- CONTROLLED SURFACE USE (CSU): Controlled surface use will be applied to new leases
  in order to minimize the potential for excessive erosion and loss of soil productivity on the
  Jicarilla Ranger District. With the exception of areas where a NSO stipulation is applied, new
  leases on the rest of the district are open to development subject to the following constraints:
  No well pad construction on slopes greater than 20 percent, with cuts over 15 feet in depth
  and no roads on side slopes greater than 40 percent.
- TIMING RESTRICTION: New drilling activity or completion (e.g., construction, drilling, completions, swabbing, pump changes, tubing changes, replacing production equipment, or any other maintenance activity that requires heavy equipment) is limited to April 1 through October 31. This timing restriction applies only to all new leases and does not apply to maintenance and operation of producing wells.