tary, provided the total term, as extended, does not exceed ten years. The leases should be subject to termination after appropriate court review in the event research and development obligations are not satisfied.

B. Commercial Production Term—The commercial term of the lease should commence upon satisfactory completion of the work to be performed during the research term and should continue for so long thereafter as mineral products are produced from oil shale in paying quantities from deposits on the land.

3172.3 *Acreage Designation and Limitations*

This section is too restrictive on the rights of the lessee because the Secretary would have the sole right to select the research site and determine the quantity of mineral deposits needed for commercial production and to select the area of commercial operations.

The lessee should have the right to select the research site and should be permitted to hold and develop the total acreage as described in the lease.

The regulations should provide that the Secretary may permit the inclusion of additional acreage in the lease, provided the total acreage covered by the lease does not exceed the legal limitation.

3172.5 *Royalties*

The proposed royalty schedule would stifle the development of a viable shale oil and associated minerals industry on federally owned lands. Such a schedule based on a graduated percentage of net income, together with the current federal income tax structure, would operate to discourage the investment of private capital. Also, such a schedule would increasingly penalize an operator in proportion to increased operating efficiency. Thus, such a schedule would have the over-all effect of placing the commercial production of shale oil and associated minerals at a serious competitive disadvantage with alternate sources of supply having a fixed royalty schedule.

The royalty rate on hydrocarbon production should be a fixed amount not to exceed 5 percent on the gross value of the first products recovered from retorting. In case of in situ operation, the royalty rate should be the same based on the first products recovered from the well head. In either case, royalty should be payable only on products sold or used off the premises.

On all other minerals, the royalty should be 5 percent of the proceeds received by lessee for such minerals on the premises in their raw form after retorting and concentrating but prior to any treating or beneficiation. Should lessee sell such minerals in another form on the premises or remove such minerals from the premises, the royalty should be 5 percent of the market value of such minerals on the premises in their raw form after retorting and concentrating but prior to any treating or beneficiation.

The royalty payments should be waived during the first five years of the research term as permitted by the Mineral Leasing Act.

3172.9 *Other Provisions*

Portions of this section which require that disclosures of technical information be made public and that patents be assigned to the Federal Government would destroy one of the most powerful competitive forces that could be brought into the oil shale development. The effect of these provisions would be to compel the lessee to disclose all of his technical "know-how" and operating data as well as background information and data accumulated from prior research efforts.

The lessee should be required to make available to the Federal Government only such data and information as is necessary to assure that the lessee is conducting a prudent and efficient operation. All technical information so acquired should be held confidential by the government during the research term.

Patents obtained by a lessee should continue to be held and licensed by him in the same manner as other patents. Under this patent system, the United States has achieved outstanding industrial and scientific progress.

3172.10 *Antitrust Consultation*

This regulation is unnecessary because of the limitations contained in the Mineral Leasing Act and should be deleted.

2244.1–7 *Exchanges of Oil Shale Lands*

Subparagraph (b) (1) is too restrictive in requiring that the oil shale lands to be exchanged have similar geologic and physical characteristics. The criterion