B. Specific Comments:

1. 3170.0-1. Purpose. The objective to "encourage participation by companies not favorably situated with respect to access to reserves of the minerals present in oil shale" could result in discouraging those companies which in the past have taken the initiative to develop research and technology for the exploitation of oil shale and related minerals. The regulations should encourage and foster research and development efforts by any and all qualified individuals and companies.

2. 3170.1. Designation of Available Lands. This section precludes industry from having any voice regarding lands that will be designated for leasing. The location of the lands is of utmost importance from the standpoint of terrain, accessibility, availability of water and other utilities and of constructing and operating plants for research and commercial operations. Also, limiting leasing of oil shale lands to not more than 30,000 acres, presumably divided among three states, would unduly restrict broad industry participation in oil shale development. This section should provide that from time to time, the Secretary will designate reasonable amounts of lands, with clear title, based on nominations made by qualified individuals and companies. The regulations should not contain a limitation as to the total amounts of land which the Secretary may so designate.

3. 3171.2-3171.3. Form and Contents of Application and Considerations to be Used in Evaluating Applicants. These sections relate to the qualifications of an individual or company for acquisition of an oil shale lease by application based on an acceptable research program and the need by the applicant for both the acreage and the products therefrom. Those portions of the sections requiring disclosure of ownership in private lands, divulgence of confidential reserve information, detailed projections of research and commercial operations, go far beyond what is necessary to determine capability and qualifications. The principle that an applicant's need for reserves should be a factor in determining whether an applicant would be granted a lease is a real cause for concern. The merits of the proposed plan of research and development and applicant's ability to carry out that plan should be the determining factors in granting or failing to grant a lease. Oil shale leases on federally owned land should be awarded by competitive bidding with the requirement that the successful bidder peform a reasonable amount of research and development leading to commercial production.

4. 3172.2. Term of Lease. The research term is indefinite and extension of the commercial production term is solely dependent upon the discretion of the Secre-

The lease terms proposed are not appropriate for the competitive bidding system advocated by Humble, and the lease terms should be modified as follows:

(a) Research Term.—All leases and notices of lease sales should provide for a specific research term. Such research term may be extended by the Secretary, 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 de-

5. 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 reseach site and should be per-

mitted 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.

6. Royalties. The proposed royalty schedule would stifle the development of avilable shale oil and associated minerals industry on federally owned lands. Such a scheduled based on a graduated percentage of net income, together with the current federal income tax structure, would operate to discourage their investment of private capital. Royalty should be payable only on products sold or used off the premises. 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