

the concepts of our economy, and would seem to meet the requirements for a competitive industry. However, the Secretary's proposal as set forth in his January 27, news release, was apparently primarily a broad statement of objectives. There was simply not enough detail for me to comment on whether the proposal would be successful in obtaining those objectives. As soon as there is enough detail available, I will ask the Chairman of the Interior Committee to schedule additional hearings on the proposal.

Earlier in these hearings, concern was expressed that the Secretary of the Interior "... believes that he can move ahead without specific legislative authority ..." to establish rules for development and production of oil shale. In fairness to the Secretary, I believe that it should be pointed out that the Secretary of the Interior does have such statutory authority under Title 30, Section 241 of the United States Code (Mineral Leasing Act of 1920), and has had such authority for more than 47 years. The statute places certain limitations on the Secretary, and prescribes that there shall be an annual rental paid for the lease, and in addition, a royalty shall be paid on production. The Secretary is also empowered to impose covenants relative to methods of mining, prevention of waste, and productive development. Further, there is an acreage limitation with respect to oil shale in that no person or corporation may hold more than one lease, and no lease shall be for more than 5,120 acres. Simply as a point of reference, the limitation on the number of acres of coal lands that one person or corporation may hold, as enacted in 1964, is 46,080 acres in any one State, with the provision for additional acreage in other States to that same person or corporation of up to 5,120 acres per State.

There has been testimony earlier, that there are 3,676,000 acres of Federal land containing not less than a 15-foot ledge of shale containing 15 gallons of oil per ton—of course, much of it contains much more. But considering the acreage limitation which I have just mentioned, this would be sufficient to allow 717 separate individuals or companies to take lease of the maximum size—5,120 acres. 5,120 acres is the maximum size of an oil shale lease, as I read the law; the Secretary has authority to grant leases of lesser acreage. As I pointed out in the May 1965 hearings before the Interior Committee, the number of acres has little meaning with relation to the quantity of oil underlying it, and perhaps a better guide would involve considerations of the richness of the shale, thickness of the bed, and the amount of overburden. Taken in this light, it would appear that there is room for a great number of developers.

As has been pointed out by other witnesses, between 15 and 20% of the oil shale is on private land. This being a fact, one might reasonably ask oneself why there is a need for a Federal leasing policy. Actually, there are several reasons. First, without a Federal leasing policy competition is effectively limited to those who now own the mineral estates of the private oil shale land, or who have sufficient capital to out-bid their competitors and acquire mineral rights. Such a situation would obviously affect the ultimate cost of shale oil and its price to the consumer. Second, the possibility of a leasing policy to be announced at a later date would tend to discourage development on private lands, because the developer might be caught in a disadvantageous competitive position with subsequent Federal lessees. Third, a Federal leasing policy is the only practical way to ensure that opportunity is available to a large number of potential developers who are serious about developing a viable oil shale industry.

It has been brought to the Subcommittee's attention that a rather serious problem exists with respect to the Government's title to much of the oil shale land. Unfortunately, the problem has become greater with the passage of time and the discovery of sodium minerals intermingled with the oil shale. Dawsonite, which is one of the sodium minerals present, may become an important source of aluminum to this country. We rely heavily on imports to supply our industry with this important metal; over 90% of our supply is imported. According to the Bureau of Mines Commodity Data Summary, our import sources for bauxite for the years 1962-1965 were: Jamaica, 57%; Surinam (or Dutch Guiana), 28%; Dominican Republic, 7%; Haiti, 4%; Guyana (formerly British Guiana), 3%; and other countries, 1%. Just a reading of the names of these countries in light of the present world situation makes one wonder as to just how much reliance we can place on these sources in the next decade or so. It would be difficult to over-rate the importance of aluminum to our national defense, and due to the intermingling of dawsonite with the oil shale, it becomes apparent that the early development of oil shale to obtain the dawsonite becomes