

FEDERAL OIL SHALE PROGRAM

The Secretary explained that the five-point program will involve the following:

"Action to clear title to public oil shale bearing lands of the three-state area. This will involve withdrawal of oil shale lands from all mineral entry other than for oil and gas leases, the initiation of examination and contests to remove clouds on title arising from oil shale and other mineral claims, and restoration of sodium to withdrawn status except where the Secretary specifically finds that particular sodium deposits can be extracted without damage to the oil shale resource. Pending sodium preference right lease applications will be promptly considered on their merits.

"A 'blocking-up program' in which the Secretary will give consideration to applications from private owners of scattered oil shale lands to exchange part of them for Federal lands of similar quality as to mineral and other physical characteristics. The purpose of these exchanges would be to permit some consolidation of private holdings which are at present too scattered for efficient mining operations. Under this program the Secretary will consider applications for blocking only where the applicant agrees to a time schedule and investment commitments for the development of economic mining and recovery operations. Applicants will also be required to agree to develop the blocked up lands in accordance with the best conservation principles, both with regard to maximizing the mineral values to be recovered and to minimizing damage to the environment.

"As the third point of the Department's oil shale program the Secretary will announce procedures which will permit the Department to consider applications from individual firms and combinations of firms for provisional developmental leases of oil shale lands. Under this part of the program, it is contemplated that the Department will contract with interested parties for a variety of approaches to the development of economic processes for the recovery of oil and associated minerals from shale. Applications for contracts would describe the process sought to be developed, a commitment of research and development expenditures, a time schedule within which these expenditures would be made, and the approximate volume and location of oil shale and associated minerals required to support operation of a commercial plant if the research and development project is successful. Parties to such contracts will be permitted access to the necessary acreage of oil shale lands for testing purposes, but leases for larger tracts for commercial development will not be issued until the research and development contract has been successfully performed. Leases will contain firm assurances that a commercial scale plant will be constructed, and that good conservation practices will be observed in the commercial operation.

"A fourth program will seek to enlist the Atomic Energy Commission and private capital with the Department of the Interior to find ways to retort the oil from the shale *in situ*. Underground atomic explosions will be researched as a means of fracturing deep deposits of shale, and making possible the retorting of the shale without ever bringing it to the surface. Such a program, if found technically and commercially feasible, would go far toward solving the difficult problems of protecting the landscape of the Green River Formation area from the scars of traditional mining and processing of minerals. The organic matter (kerogen) present in the rock formation known as oil shale is a solid that is converted to a liquid by heating. The concept of underground retorting is that the shale first should be broken into small pieces by a massive explosion. Thereafter heat would be applied to the broken shale, and the liquid oil pumped to the surface.

"Finally, the Department will request funds for a broad program of research and investigation by the Geological Survey, Bureau of Mines, and Bureau of Land Management. Some of these research projects will involve close cooperation and joint participation with other Federal agencies, industry and public and private research facilities. Objectives of this part of the program will include the development of more information on the location, characteristics, and values of the oil shale and other mineral resources of the Green River Formation, and of better technology for resource development consistent with sound principles of conservation and environmental control.

"A major concern in developing the oil shale program," the Secretary said, "has been to enunciate policies and procedures that will protect the public interest fully, and at the same time will offer reasonable incentives to private capital to participate in an accelerated research and development program.