

In the long run, all these requirements will have to be supplied from both crude oil and shale oil. I am sure all realize that a full-scale oil shale industry cannot be developed overnight and that it is going to require time and the expenditure of literally hundreds of millions of dollars. All that the Secretary of the Interior has proposed, and all that we are now discussing, is the first step, a step that the President indicates may break into a run if the country's petroleum supply is further threatened.

In summary: (1) We recommend the Secretary of the Interior for taking this first step toward the encouragement of a shale oil industry.

(2) We feel, however, the Department's proposed regulations have not been designed with intent to speed the development of a viable oil shale industry and are, in fact, unworkable.

(3) We believe the suggestions we have made are workable, will encourage neither speculation, discrimination, nor special advantage, and will expedite the emergence of a shale oil industry.

Gentlemen, in anticipation of possible questions you may have as to Union's current activity on oil shale and our attitude relative to its future, I would like to make the following comments:

A few months ago we announced plans for a new 140,000-barrels-per-day oil refinery near Chicago. Construction now estimated to cost approximately \$200 million is underway. You will be surprised and I hope pleased to know that we have incorporated into the design provision for processing 70,000 barrels per day of synthetic shale oil. Further, the shale oil feedstock will be essentially free of sulfur—a bonus of great importance in our concern with air pollution.

However, as a precautionary measure and in recognition of the failure of the executive branch of the Federal Government to establish a favorable and equitable climate for the oil shale industry, we are also designing the plant to process 70,000 barrels per day of synthetic tar sand oil from Alberta, Canada.

It is to our shame that our good neighbor to the north has pioneered the way in synthetic oil production while the Department of the Interior for the past 20 years has failed to provide the necessary leadership to create an atmosphere conducive to similar private investments in the United States. And may I hasten to add, American capital is primarily involved in the Canadian project.

In addition to a viable first phase leasing policy by the Department of the Interior, Congress and/or the executive branch must provide adequate percentage depletion applied to the raw shale oil. Further, industry must have stability and reliability in respect to the foreign oil import policy which has deteriorated into a chaotic political shamble over the past 3 years. Given an equitable environment, shale oil can be on the threshold of commercial reality. Do you not think the citizens of the State of Colorado and other Rocky Mountain areas are just as entitled to new job opportunities as the citizens of Alberta?

I think you will also be interested in our continued research activity. First, we have undertaken an experimental program on a retorting process developed in West Germany. Colorado oil shale arrived in that country quite recently and the program is now underway.

Second, further experimental work is underway in our laboratories at Brea, Calif., both on retorting and refining. And third, Union Oil