Although the participation of private enterprise is clearly contemplated, almost no incentive seems to be offered to encourage the same. What does one gain by engaging in the research and development program

Frankly, an onerous responsibility and far too much discretion have been

placed with the Secretary of the Interior. With respect to particular areas of the proposed regulations, my comments are as follows:

OBTAINING A COMMERCIAL PRODUCTION LEASE

1. There are no firm assurances by the federal government that one will receive a production lease even if he acts in good faith in performing his R & D lease. We should not expect the private sector to spend the large sums which will be required in research and development on the mere hope the Secretary may extend

the R & D lease into a full scale production lease.

2. Of the three prerequisites to the Secretary's determination that a production lease shall be granted, the requirement that the lessee shall have "developed a mining and processing method" which is commercially feasible is most objectionable. There are no guidelines as to what constitutes a "method". Must the "method" be wholly new or may it contain elements of other processes which the regulations, as proposed, would place in the public domain? I question the necessity and desirability of such a provision particularly in view of the other two conditions: that the lessee's research activity was conducted "substantially in accordance" with an approved plan, and that the lessee "complied with all the terms of the lease". The lessee who completes the R & D phase by full good faith performance should not be penalized simply because he did not come up with a new method satisfactory to the Secretary.

3. Apparently the only manner in which you can acquire a production lease is to first complete an R & D lease program. This forces those who may have

already developed advanced techniques to forego production.

## DISCLOSURE AND PATENTS

1. I am not convinced that techniques invented during the R & D stage should be placed in the public domain without compensation. Certainly many companies are needed in the field to avoid undue concentrations of economic power. However, it seems to me a better incentive system to accomplish this would be to allow patents on inventions made during the R & D stage with the requirement that the techniques be subject to licensing at specified royalties.

2. The regulations are silent as to whether the inventor will have exclusive rights to inventions made during the production phase. For clarity, a statement

should be added dealing with the matter.

3. The proposed regulations would permit access by the Secretary not only to all facilities on the leased permises, but to any other facilities of the lessee where research is conducted. Moreover, the Secretary would have the right to inspect "all" books and records directly relating to the research. In my view this is far too sweeping, and will undoubtedly discourage participation by many. Representatives of government should not be allowed to run at large through the lessee's off-the-premises research departments or his books and records under the guise of a connection with oil shale. The annual progress reports and final report supplementing on-premises inspection should be adequate.

4. I am wary of the lessee being precluded from publishing or communicating anything concerning his research work with parties other than representatives of the Department of Interior unless he has the prior written approval of the Secretary. Such a provision would stifle or encumber the free exchange of ideas in trade journals, at conventions of the various professional groups whose members would be engaged in research, etc. There is no similar industry-wide ban among existing industries, nor should there be one among the emerging oil

shale and associated minerals industry.

## ACREAGE

1. Since the lease is apparently to be issued with its final acreage only tentative, and the Secretary is to designate "the part of the leased lands" upon which research is to be conducted, does the 30,000 acre limit apply to the former or the latter? The regulations are ambiguous in this respect for they also seem to contemplate that only the amount of the R & D acreage will be known up to the time for extension. At that point, a production lease may be granted for an "area" containing "reasonable reserves" as determined by the Secretary.