

Although it must be recognized that unexpected situations may arise at anytime during the course of mining which would alter the factors referred to above, an effort should be made to arrive at the most opportune time for the determination of the activities to be undertaken in furtherance of mining according to good and miner-like practices and with a view to conserving the other resources. It is suggested that the most opportune time to make such a determination is after the lease has been signed and sometime shortly before mining commences into given area.

B. Authority to control exploration activities

Exploration activities performed in western phosphate mining which would disturb the surface consist largely of digging comparatively small trenches and drilling exploration holes. The proposed regulations require the holder to present to the Department a plan of his operations including where roads will be built, etc., and further grant to the Department the authority to designate changes in these plans and thus control where holes will be drilled and trenches dug.

In phosphate exploration or mining, it is impossible to "control" the location of drill holes. The location of a given hole is determined by geologic conditions. In the process of exploration, the lessee must be allowed to drill where his training and experience in the light of geologic conditions indicate he should. In most instances he does not know where his next drill hole should be until he has completed his last drill hole—and the time lapse may be a matter of hours. This is true both as to exploration conducted to determine the presence of phosphate under a phosphate prospecting permit and as to exploration done after the granting of the lease for the purpose of determining how the ore body lies and its phosphate content. Since it is impossible to plot in advance the location of drill holes, if the Department is to dictate the location of such drill holes, it would be necessary to either have a representative from the Department on the scene when the drilling was taking place or to have the lessee obtain permission to drill each hole. It is submitted that either procedure is impractical and in fact unnecessary inasmuch as the location of such holes is determined by geologic conditions, and the lessee for economic reasons will not drill any more holes than is necessary. Reclamation of the areas affected by exploration activities could be accomplished without the submission of a plan of operation prior to commencing the exploration activities by establishing the requirements for such reclamation in the regulations.

C. Authority to control methods of extracting phosphate

The proposed regulations contemplate that the holder shall, prior to commencing exploration, development, or extracting operations, present to the Department a description of the proposed methods of operating and that the Department may designate the changes in such plans that it deems necessary. "Method of Operation" is defined in the proposed regulations as:

"The method or manner by which a cut or open pit is made, the overburden is placed or handled, water is controlled or affected and other acts performed by the operator in the process of exploring or uncovering and removing a mineral deposit." (§ 23.3 (e))

The regulations further provide that this description shall include but not be limited to:

- (a) Proposed roads or vehicular trails to the area.
- (b) Size and types of equipment to be utilized for exploration, development or extractive operations.
- (c) Capacity, character, standards of construction, size and location of structures and facilities to be built.
- (d) The method of handling, storing and using explosives and fire, and the safety precautions to be taken during such use.
- (e) Measures to be taken to avoid damage to property or improvements, roads, trails and water courses.
- (f) Measures to be taken to prevent or control fire, soil erosion, water pollution, damage to fish and wildlife, and hazards to public health and safety.
- (g) Proposed manner and time of performance of work to reclaim areas disturbed by holders operation.

The problem of presenting this type of information before exploration commences has already been discussed herein. Furthermore, the determination of the size and type of equipment that will be used may change from day to day and from hour to hour. It is submitted that to allow the federal government through