

## MINE DEWATERING

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I think it would be appropriate to initially define the problem created by mine dewatering in New Mexico.

Mine dewatering is simply what the term implies: it is the extraction or discharge of water encountered in mineral production. Dewatering is necessary in several mining operations. For example, the Kaiser coal mines in the Raton area are now encountering significant quantities of water. Significant amounts of water are encountered in the production of molybdenum in the Taos and Questa area. Exxon, in its planned copper mine near Silver City, anticipates they will encounter water in significant amounts.

Of course, the dewatering controversy has focused primarily on the uranium industry. Dewatering has occurred in the Ambrosia lake district, north of Grants, since the late 1950s. Today there are approximately 35 active uranium mines in the Grants area. Not all of them are wet mines; that is, not all of them encounter water. Those that do are presently discharging water in the vicinity of 35 to 40 thousand acre-feet a year. Most of this water is coming from the Westwater Canyon Members of the Morrison Formation. The New Mexico Department of Energy estimates that by the mid-1980s New Mexico will have 72 active uranium mines discharging water in quantities of approximately 90 cubic feet per second. Of course, that estimate depends on the economics of the uranium industry which, if today's indications hold true, are unsettled.

In any event, we are speaking about a significant amount of water. The water encountered in these mining operations cannot all be beneficially used by the companies. Some is consumed in the leaching process, some is consumed in dust control and other operational needs; but the vast majority of the water is simply discharged into surrounding arroyos and allowed to percolate back into the groundwater system. In order to comply with state and federal water quality standards, it is necessary for mining companies to clean the water encountered prior to discharging it at the surface.

In the uranium industry, that cleaning process is usually accomplished with what is known as an ion-exchange facility. One of the consequences of this cleaning process is that uranium particles drop out of the water. Mining companies estimate that the process does not yield enough uranium to pay for the ion-exchange facility. In any event, the use of the ion-exchange process and the consequential recovery of uranium has significant legal effects. It is the law of New Mexico that a permit to appropriate water is necessary when water is beneficially used. Applied to the dewatering situation, as long as water encountered in the mine shaft was not beneficially used, no permit to appropriate that water was required.

As you might expect, given the quantities of water involved here, the fact that mining companies were not subject to the jurisdiction of the State Engineer caused significant public

controversy. On the other hand, once companies began to clean that demined water with an ion-exchange facility, they are considered to be beneficially using the water, since that process does drop out uranium particles. Accordingly, those companies using the ion-exchange process must obtain a permit from the State Engineer. Again, given the quantities of water involved here, and given the state of New Mexico water law prior to the enactment of the Mine Dewatering Act, companies were rightfully afraid that a permit to appropriate water would be very difficult to obtain. Without a permit from the State Engineer to appropriate the water, a mining company's operation of its ion-exchange facility would be significantly clouded. If the mining company were not able to operate its ion-exchange facility, it, therefore, could not clean the water that it was encountering. If the water was not cleaned, water-quality discharge regulations provided that no discharge could be made, and without the ability to discharge the water, mining operations would have to cease. So I hope you can appreciate that the problem of mine dewatering was a very difficult problem, given the state of the law prior to the enactment of the Mine Dewatering Act.

The mining industry began studying the problem in earnest at the close of the 1979 legislative session. The New Mexico Mining Association appointed an ad hoc committee composed primarily of technical and legal people. The committee actively consulted and received the advice and input of other interested groups, primarily,

the New Mexico Cattle Growers Association and the New Mexico Farm Bureau. The State Engineer was, of course, consulted throughout the drafting process. The resulting legislation, known as the Mine Dewatering Act, was passed by the 1980 session of the New Mexico Legislature and was signed by the governor in March of this year.

There are two very basic provisions in the law. The first subjects companies engaged in mine dewatering to the jurisdiction of the State Engineer. As I have mentioned, prior to the Mine Dewatering Act, those companies that were simply dewatering their mines were not subject to the State Engineer's jurisdiction. Now under the bill, prior to engaging in mine dewatering a company will have to seek a permit from the State Engineer to dewater; the company will have to assume the traditional burdens of proof on the issue of nonimpairment before the State Engineer. The second significant provision in the bill deals with the right of replacement. The bill provides that companies engaged in mine dewatering and, in fact, all appropriators of water will be given the right to replace the water of other water owners whose activity is impaired by the applicant. If the State Engineer finds that impairment will occur, an applicant will have the ability to submit a plan of replacement to the State Engineer. In that plan, an applicant will outline a process by which he or she, or the mining company, attempts to cure any impairment found to exist as a result of its activities. That cure can come in many forms: the applicant can propose to drill the impaired owner a new well; can deepen the

existing well of an impaired owner; can seek to assume the additional lid costs which are incurred as a result of his activity; and finally, a company can tender a substitute water supply to the impaired owner. If the State Engineer finds that the plan of replacement is adequate, he will grant the permit to appropriate. If the plan of replacement is found to be inadequate, or will not cure impairment, the State Engineer, of course, denies the permit.

There are several other factors or provisions in the bill. In order to implement a plan of replacement, an applicant is given a right of condemnation. The condemnation right is not dissimilar to existing condemnation law in the area of water rights; we do not believe it to be a significant new development. It is intended to permit an applicant to implement the plan which he believes, and which the State Engineer would have to find, cures any impairment caused by his activity. The State Engineer retains jurisdiction to supervise the maintenance and implementation of the plan of replacement. It is important to recognize that the bill provides that a mining company cannot dewater for the life of its mine - say 30 years - then simply pick up and leave. A mining company will be accountable for all impairment that it causes, even if that impairment occurs after the mining company has departed the state.

We suggest that, while the right of replacement is available to all appropriators, its use will be limited, at least initially, to mine-dewatering circumstances, since mine dewatering presents one of the few times that an appropriator has excess water to tender to an

impaired party. We believe that the act is a sound and reasonable response to the problem created by mine dewatering. It provides a degree of flexibility to the State Engineer, to the general public, and to the mining companies which was not previously available under law. Yet, at the same time, we believe that the bill does nothing to disrupt the traditional doctrines of prior appropriation, which have served the state so well in the past.