

IN THE OFFICE OF THE STATE ENGINEER

IN THE MATTER OF APPLICATIONS 52983)
AND 52984 FILED TO APPROPRIATE THE)
PUBLIC WATERS OF AN UNDERGROUND)
SOURCE IN IVANPAH VALLEY - NORTHERN)
PART, CLARK COUNTY, NEVADA.)

RULING

GENERAL

Applications 52983 and 52984 were filed in the office of the State Engineer on March 3, 1989, by the Baron Mining Corporation to appropriate 0.215 and 0.292 c.f.s., respectively. The water is to be appropriated from an underground source for mining, milling, and domestic purposes. The place of use is within the Baron Claim in Section 23, 24, 25, 26, 27, 34, 35, and 36 in T.25S., R.59E., M.D.B.&M. The points of diversion are within the SW $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 27 and the SE $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 23, T.25E., R.59E., M.D.B.&M. for Applications 52983 and 52984, respectively.¹

FINDINGS

I.

On August 9, 1982, State Engineer's Order No. 792 designated the Ivanpah Groundwater Basin in Clark County, Nevada as a basin in need of additional administration.² Irrigation was declared a non-preferred use. Applications 52983 and 52984 have their respective points of diversion within the designated area described as the Ivanpah Valley - Northern Part Groundwater Basin.

II.

Total appropriated groundwater under existing permits and certificates on an annual basis in Ivanpah Valley is approximately 3,315 acre-feet.

¹ Public record in the office of the State Engineer.

² NRS Chapter 534.

III.

The perennial yield of a groundwater reservoir may be defined as the maximum amount of water of useable chemical quality that can be withdrawn and consumed economically for an indefinite period of time, and can be determined by a comparison analysis of groundwater recharge (inflow) and maximum natural discharge (outflow) available for recapture. Virtually all the recharge to the Ivanpah Basin comes from precipitation.³ Precipitation amounts in the Ivanpah Valley area range from 3 inches on the valley floor to 20 inches in the higher elevations. Glancy,³ estimated that recharge to the aquifer was 1,500 acre-feet, and only 700 acre-feet of that was the perennial yield of the aquifer.

IV.

Withdrawals of groundwater in excess of the perennial yield contributes to adverse conditions such as water quality degradation, storage depletion, diminishing yield to wells, increased economic pumping lifts, land subsidence and possible reversal of groundwater gradient which could result in significant changes in recharge/discharge relationships. These conditions have developed in several other groundwater basins within the State of Nevada where storage depletion and declining water tables have been recorded and documented and provide substantial evidence of adverse affect on the resource.⁴

Current potential withdrawals from the Ivanpah Basin are over four times the perennial yield for the Ivanpah Valley. The potential for storage depletion, groundwater quality degradation and the adverse effect on existing water rights already exist in the valley and would become greater with any additional appropriation.

³ Water Resources - Reconnaissance Series, Report 46, Water - Resources Appraisal of Mesquite-Ivanpah Valley Area, Nevada and California, June 1968, Patrick A. Glancy.

⁴ Available in State Engineer' office.

V.

Approving Applications 52983 and 52984 would allow an additional 368 acre-feet annually to be pumped from an already over appropriated groundwater basin. Groundwater quality in this area is presently high in total dissolved solids, therefore increased withdrawals could have a significant impact on water already of poor quality.

CONCLUSIONS

I.

The State Engineer has jurisdiction of the parties and the subject matter of the action.

II.

The State Engineer is prohibited by law from granting a permit where:⁴

- A. There is no unappropriated water at the proposed source, or
- B. The proposed use conflicts with existing rights, or
- C. The proposed use threatens to prove detrimental to the public welfare.

III.

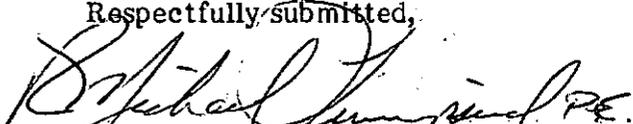
Existing water rights in Ivanpah Valley - Northern Part exceed the perennial yield of the basin. To grant mining and milling rights that consume additional quantities of water would adversely affect existing rights and threaten to prove detrimental to the public welfare.

⁴ NRS 533.370 Subsection 3.

RULING

Applications 52983 and 52984 are herewith denied on the grounds that additional groundwater withdrawals for mining and milling purposes from the area described in the applications would tend to impair the value of existing rights and be otherwise detrimental to the public welfare.

Respectfully submitted,


R. MICHAEL FURNIPSEED, P.E.
State Engineer

RMT/KH/bk

Dated this 31st day of
July, 1990.