

IN THE OFFICE OF THE STATE ENGINEER  
OF THE STATE OF NEVADA

IN THE MATTER OF APPLICATIONS 60222 )  
60223 FILED TO CHANGE THE PLACE OF USE )  
AND THE MANNER OF USE OF THE WATERS OF )  
AN UNDERGROUND SOURCE, HERETOFORE )  
APPROPRIATED UNDER PERMIT 47525 AND )  
PERMIT 47526 RESPECTIVELY, WITHIN THE )  
DAYTON VALLEY GROUND WATER BASIN (103), )  
LYON COUNTY, NEVADA. )

RULING

# 4166

GENERAL

I.

Application 60222 was filed on July 19, 1994, by Hughes Development Corporation to change the place and manner of use of 0.323 cfs of water from an underground source, heretofore appropriated under Permit 47525, Certificate 12958. The proposed manner of use is for quasi-municipal purposes within the NE $\frac{1}{4}$  NW $\frac{1}{4}$ , NW $\frac{1}{4}$  NE $\frac{1}{4}$ , SE $\frac{1}{4}$  NW $\frac{1}{4}$  and the SW $\frac{1}{4}$  NE $\frac{1}{4}$  of Section 5, T.16N., R.22E., M.D.B.&M. The existing manner of use is for mining and milling purposes within portions of the SE $\frac{1}{4}$  NW $\frac{1}{4}$  and the SW $\frac{1}{4}$  NE $\frac{1}{4}$  of said Section 5.<sup>1</sup>

II.

Application 60223 was filed on July 19, 1994, by Hughes Development Corporation to change the place and manner of use of 0.35 cfs of water from an underground source, heretofore appropriated under Permit 47526, Certificate 12959. The proposed manner of use is for quasi-municipal purposes within the NE $\frac{1}{4}$  NW $\frac{1}{4}$ , NW $\frac{1}{4}$  NE $\frac{1}{4}$ , SE $\frac{1}{4}$  NW $\frac{1}{4}$  and the SW $\frac{1}{4}$  NE $\frac{1}{4}$  of Section 5, T.16N., R.22E., M.D.B.&M. The existing manner use is for mining and milling purposes within portions of the SE $\frac{1}{4}$  NW $\frac{1}{4}$  and the SW $\frac{1}{4}$  NE $\frac{1}{4}$  of said Section 5.<sup>2</sup>

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<sup>1</sup> File No. 60222, Public records in the Office of the State Engineer.

<sup>2</sup> File No. 60223, Public records in the Office of the State Engineer.

FINDINGS OF FACT

I.

Applications 60222 and 60223 seek to change the manner of use of Permit 47525, Certificate 12958 and Permit 47526, Certificate 12959, respectively. Permits 47525 and 47526 appropriated underground water for a heap leach precious metals recovery circuit at the Alhambra Mines tailings recovery project. The permits and associated certificates were issued with the understanding that the appropriation of water for mining and milling purposes was, by its nature, a temporary appropriation of water which would terminate with the cessation of the mining and milling operations. A permit term in both Permits 47525 and 47526 reflects this understanding:

This permit is issued under the preferred use provisions of NRS Chapter 534. The manner of use of water under this permit is by nature of its activity a temporary use and any application to change the manner of use granted under this permit will be subject to additional determination and evaluation with respect to the permanent effects on existing rights and the resource within the ground water basin.<sup>3</sup>

Given the above permit term, the State Engineer finds that Applications 60222 and 60223 must be reviewed to determine their potential effects on existing water rights and to determine the availability of water for appropriation in the Dayton Valley Groundwater Basin. The State Engineer further finds that the temporary nature of these mining and milling permits makes them unsuitable for changes to a permanent manner of use such as quasi-municipal use.

II.

In accordance with NRS 512.160(3), Alhambra Mines notified the Nevada Mine Inspector's Office of the permanent closure of its heap

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<sup>3</sup> File No's. 47525 and 47526, public records in the Office of the State Engineer.

leach facility in January, 1986. The Mine Inspector's Office has not received any notification from Alhambra Mine or its successor in interest of any intention to resume the project.<sup>4</sup> An informal field investigation by personnel from the State Engineer's office on August 17, 1990, revealed that the milling operation appeared to be in non-use.<sup>5</sup> The State Engineer finds that the appropriation of underground water under Permit 47525 and Permit 47526 was granted for a finite time period, which ended with the closure of the mining and milling operation.

### III.

The perennial yield of a hydrologic basin is the maximum amount of water of usable chemical quality that can be consumed economically each year for an indefinite period of time. Perennial yield cannot exceed the natural replenishment to an area indefinitely, and ultimately is limited to the maximum amount of natural recharge that can be salvaged for beneficial use. If the perennial yield is continually exceeded, ground water levels will decline until the ground water reservoir is depleted. Withdrawals of ground water in excess of the perennial yield contribute to adverse conditions such as water quality degradation, storage depletion, diminishing yield of wells, increased uneconomic pumping lifts, land subsidence and possible reversal of ground water gradients which could result in significant changes in the recharge-discharge relationship.

The potential estimated ground water recharge to Dayton Valley by precipitation is 7,900 acre-feet per year. An additional 1545 acre-feet is added from subsurface inflow through alluvium

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<sup>4</sup> Information available, in the Office of the Administrator of the Division of Mine Inspection.

<sup>5</sup> Public records in the Office of the State Engineer, under Permits 47525 and 47526.

from Eagle Valley and Carson Valley. Therefore, the perennial yield of Dayton Valley is 9,445 acre-feet per year.<sup>6</sup>

The committed ground water resource in the form of permits and certificates issued by the State Engineer's Office within the Dayton Valley Ground Water Basin currently exceeds 29,000 acre-feet annually.<sup>7</sup> The State Engineer finds that the approval of Applications 60222 and 60223 in the Dayton Valley Groundwater Basin where appropriations of ground water substantially exceed the perennial yield, would adversely affect existing rights and be detrimental to the public interest.

#### IV.

Applications which requested a permanent appropriation of underground water for quasi-municipal purpose within the Dayton Valley Ground Water Basin have been denied by the State Engineer since 1973. These denials were on the grounds that, "Withdrawals of additional groundwater in a basin in which appropriations of groundwater substantially exceed the perennial yield of the basin would, therefore, adversely affect existing rights and be detrimental to the public interest and welfare."<sup>8</sup> The change in the manner of use as proposed under Applications 60222 and 60223 represents a change from a temporary manner of use to a permanent manner of use and as such, can be regarded as an additional appropriation of underground water from the Dayton Valley Ground Water Basin. The State Engineer finds that Applications 60222 and 60223 have the effect of appropriating water for a similar use and

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<sup>6</sup> Water Resources-Reconnaissance Series Report #59, public records in the Office of the State Engineer.

<sup>7</sup> Dayton Valley Groundwater Basin Hydrologic Summary, public records in the Office of the State Engineer.

<sup>8</sup> See Rulings for Permits 27441, 27557, 27765, 29238, 30719, 36130, 36131, 38449, 38450, 38451, 38452, 38453, 38454, 38455, 38456, 38457, 38458, 38459, 40364, 40762, 41741, 41542, 44238 and 47429, public records in the Office of the State Engineer.

in the same basin as applications which have been denied in the past.

CONCLUSIONS

I.

The State Engineer has jurisdiction in the subject matter.<sup>9</sup>

II.

The State Engineer is prohibited by law from granting a permit where:<sup>10</sup>

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

III.

Where a previous application for a similar use of water within the same basin has been rejected on the grounds that there is no unappropriated water, or where its proposed change or use conflict with existing rights or threatens to prove detrimental to the public interest, the new application may be denied without publication.<sup>11</sup>

IV.

The appropriation of water under Permits 47525 and 47526 was for mining and milling purposes which is, by the nature of its activities, a temporary use. Applications 60222 and 60223 propose, in part, to change this manner of use to quasi-municipal use. The State Engineer concludes that the proposed change would, in effect, replace a temporary use with a permanent use and would as such represent an additional appropriation of underground water within a basin which is currently over appropriated. The State Engineer

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<sup>9</sup> NRS 533 and 534.

<sup>10</sup> NRS 533.370.

<sup>11</sup> NRS 533.370(3).

further concludes that to approve such an application would adversely affect existing rights and would be detrimental to the public interest.

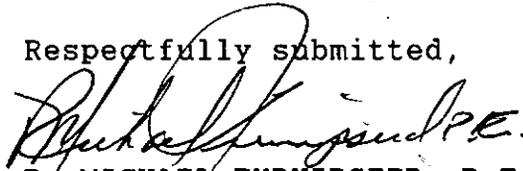
V.

Applications 60222 and 60223 have the effect of attempting to appropriate groundwater for a similar use and within the same basin as previous applications that have been denied. Therefore, Applications 60222 and 60223 may be denied without publication.

RULING

Application 60222 and Application 60223 are hereby denied on the grounds that the granting thereof would adversely affect existing rights and would be detrimental to the public interest.

Respectfully submitted,



R. MICHAEL TURNIPSEED, P.E.  
State Engineer

RMT/MDB/pm

Dated this 7th day of  
February, 1995.