**IN THE OFFICE OF THE STATE ENGINEER**

IN THE MATTER OF APPLICATIONS 51555,) 51556 AND 51557 FILED TO APPROPRIATE) THE UNDERGROUND WATER WITHIN) CRATER FLAT, NYE COUNTY, NEVADA. )

**RULING**

## GENERAL

I.

Application 51555[1] was filed with the State Engineer by Daniel W. Melius on behalf of the U.S. Nevada Gold Search (USNGS) on November 12, 1987, to appropriate 2.0 c.f.s. of underground water for mining milling and domestic purposes within the SE¼ NE¼ Section 7, T.12S., R.48E., M.D.B.&M.

Application 51556[1] was filed with the State Engineer by Daniel W. Melius on behalf of USNGS on November 12, 1987, to appropriate 2.0 c.f.s. of underground water for mining, milling and domestic purposes within the SW¼ SE¼ Section 7, T.12S., R.48E., M.D.B.&M.

Application 51557[1] was filed with the State Engineer by Daniel W. Melius on behalf of USNGS on November 12, 1987, to appropriate 2.0 c.f.s. of underground water for mining, milling and domestic purposes within the SE¼ SW¼ Section 7, T.12S., R.48E., M.D.B.&M.

II.

Application 51555 was timely protested[2] by Shirley J. Harlan and Elizabeth Keal (hereinafter "Harlan and Keal") on June 22, 1988, for the following reasons and on the following grounds to wit:

> "The location of the proposed drilling for water threatens the Oasis Valley, as well as the entire town of Beatty, with drought. According to our calculations, this application would total 162,000 gallons per hour. In an

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[1] Public record in the office of the State Engineer.

[2] Public record in the office of the State Engineer under Application 51555.

> environmental assessment report done for a proposed mining operation in Rhyolite, that amount of usage would lower the water level by one foot for a radius of five miles around the well. This decrease in water would adversely affect the Oasis Valley to the west, and Specie Spring to the south, which is a major source of water for countless varieties of wild life, and the proposed site for release of Big Horn sheep."

Protestants Harlan and Keal requested that Application 51555 be denied.

Application 51555 was timely protested[3] by George E. and LaRene M. Younghans on June 8 and June 21, 1988, and Applications 51556 and 51557 were timely protested on June 23, 1988, for the following reasons and on the following grounds, to wit:

> Protestant owns a ranch in Oasis Valley that is fed by spring water. Protestant feels that there is a lack of current information of the local hydrogeology and adjoining aquifers along with their ability to replenish and should be fully investigated before proceeding. The request of this mining operation, along with others in the area, could deplete protestant's springs and destroy protestant's livelihood and the domestic tranquility of protestant's ranch and the entire Oasis Valley.

Protestants Younghans requested that Applications 51555, 51556 and 51557 be denied.

Applications 51555, 51556 and 51557 were the subject of a letter of concern by the United States National Park Service, dated October 6, 1988, for the following reasons and on the following grounds, to wit:

> Each of the applications would permit the diversion of 2 cubic feet per second of water, from January 1 to December 31 of each year, in the Crater Flat Area near Death Valley

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[3] Public record in the office of the State Engineer under Applications 51555, 51556 and 51557.

National Monument. While the Crater Flat Area is not a designated groundwater basin, it appears that, based on recent studies, it recharges the Amargosa Desert Basin, No. 230, a designated groundwater basin. Diversions of this magnitude near Death Valley Monument could potentially impact the water rights of the United States at the Monument, including the water level at Devil's Hole, where the United States has an adjudicated Federal reserved water right.[3]

III.

After all of the subject parties had been duly notified[4] as required under NRS 533.365(3), a hearing was held on January 10, 1989, for the receiving of evidence and testimony deemed necessary by the State Engineer for a full understanding of the above-referenced applications and portests. A significant amount of testimony and evidence was developed at the subject hearing as all parties were provided a full opportunity to present their respective positions. The State Engineer took administrative notice of certain matters more fully set forth in the transcript of the hearing.[1]

IV.

U.S. Geologicial Survey professional paper 712-C, "Hydrogeologic and Hydrochemical Framework, South-Central Great Basin, Nevada-California, with Special Reference to the Nevada Test Site," 1975, was prepared by I.J. Wingrad and W. Thordarson. Water Resources-Reconnaissance Series Report 10, "Ground Water Appraisal of Sarcobatus Flat and Oasis Valley, Nye and Esmeralda Counties, Nevada, July 1962, by G.T. Malmberg and T.E. Eakin, was prepared cooperatively by the U.S. Geological Survey and the Nevada Department of Conservation and Natural Resources. Water Resources Reconnaissance Series, Report 14, "Geology and Ground Water of Amargosa Desert, Nevada-California," March, 1963, by G.E. Walker and T.E. Eakin, was prepared cooperatively by the U.S. Geological Survey and the Nevada Department of Conservation and Natural Resources. Water Resources Reconnaissance Series, Report 54, "Regional Ground Water Systems in the Nevada Test Site Area, Nye, Lincoln and Clark Counties," 1970, by F. Eugene Rush, was prepared cooperatively by the U.S. Geological Survey and the Nevada Department of Conservation and Natural Resources.

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[4] See State of Nevada Exhibit 1, Notice of Hearing of January 10, 1989.

These investigations generally describe the hydrology in the vicinity of the Crater Flat Basin.[1]

## FINDINGS OF FACT

I.

Applications 51555, 51556 and 51557 all propose to divert underground water for beneficial use in the Crater Flat Groundwater Basin.

II.

The estimated perennial yield of the subject basin is estimated to be 900 acre-feet annually.[5] "Perennial yield" is defined as the maximum amount of water that can be withdrawn each year over the long term without depleting the groundwater reservoir.

III.

The applicant has testified that the total water use for the projected life of applicant's mining operations will be 400 acre-feet per year for 6 years and 800 acre-feet per year for one additional year.[6]

IV.

Expert testimony provided by the applicant indicated that protestant's springs are located in a different groundwater basin, namely, the Oasis Valley Basin, and that the water levels in the protestant's areas are at a higher elevation than the water level at the applicant's proposed source. Additional testimony established that applicant's water appropriation, if granted, will have no cumulative effect upon the Amargosa farm area, upon Devil's Hole, or upon the Springs of Death Valley National Monument.[7]

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[5] Reconnaissance Series No. 54, p. 15.

[6] See 1/10/89 Transcript, pp. 47-48, K. Gavin and Page 112, J. Sharp.

[7] See transcript pp. 67-131, testimony of John V. A. Sharp, Ph.D.

V.

Based upon information and records available to the office of the State Engineer, existing water rights in the Crater Flat Groundwater Basin total 2,604 acre-feet annually. The State Engineer's records indicate that the total groundwater withdrawals under existing rights in the Crater Flat Groundwater Basin has been less than the perennial yield. Of the 2,604 acre-feet, 2,533.9 are permitted for mining and milling use under Permit No. 48436. Records filed with the State Engineer indicate that the full 2,533.9 acre-feet are not currently being put to beneficial use. The proposed manner of use of water (mining and milling) under Applications 51555, 51556 and 51557 are by nature temporary water uses and will expire upon termination of the mining project or on January 1, 1997, whichever occurs first.[1]

## CONCLUSIONS

I.

The State Engineer has jurisdiction of the parties and of the subject matter of this action.[8]

II.

The State Engineer shall approve an application submitted in the proper form which contemplates the application of water to beneficial use unless:

1. There is no unappropriated water in the proposed source of supply,

2. The proposed use conflicts with existing rights, or

3. The proposed use threatens to prove detrimental to the public interest.[9]

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[8] NRS Chapters 533 and 534.

[9] NRS 533.370(3).

III.

NRS 534.110(4) provides, as an express condition of each appropriation of groundwater acquired pursuant to Chapters 533 and 534, that the right of the appropriator shall relate to a specific quantity of water and that such right must allow for a reasonable lowering of the static water level at the appropriator's point of diversion.

IV.

The issuance of the subject permits, with effective monitoring requirements through development stages, up to and including full-scale operations will provide a system that will detect any trend that will conflict with existing rights to the extent they cannot be satisfied.

**RULING**

The protests to Applications 51555, 51556 and 51557 are herewith overruled on the grounds that the proposed appropriations will not conflict with existing rights nor prove detrimental to the public interest. A groundwater monitoring plan for Crater Flat Basin must be submitted to the State Engineer for approval within 90 days of the date of this ruling. Permits will be issued upon receipt of statutory fees. The State Engineer does not waive the right to regulate and restrict the groundwater withdrawals under Permits 51555, 51556 and 51557 if necessary. The State Engineer does not waive the right to impose additional terms and/or conditons upon review and evaluation of data submitted as a result of the monitoring program.

Respectfully submitted,

PETER G. MORROS
State Engineer

PGM/GWQ/bk

Dated this 15th day of June, 1989.