

APPLICATION FOR PERMIT  
TO APPROPRIATE THE PUBLIC WATERS OF THE STATE OF NEVADA

MAR 17 1978

Date of filing in State Engineer's Office.....

Returned to applicant for correction.....

Corrected application filed.....

Map filed..... MAR 17 1978 under 35156

The applicant Sunoco Energy Development Company  
Suite 1500  
12700 Park Central Pl., Box 9, of Dallas  
Street and No. or P.O. Box No. City or Town

Texas (75251), hereby make application for permission to appropriate the public waters of the State of Nevada, as hereinafter stated. (If applicant is a corporation, give date and place of incorporation; if a copartnership or association, give names of members.)

Incorporated January 2, 1975 in the State of Delaware

1. The source of the proposed appropriation is Underground Well No. 8  
Name of stream, lake or other source.

2. The amount of water applied for is 3.25 second-feet  
One second-foot equals 448.83 gals. per min.

(a) If stored in reservoir give number of acre-feet..... acre-feet

3. The water to be used for Industrial  
Irrigation, power, mining, manufacturing, domestic, or other use.

4. If use is for:

(a) Irrigation (state number of acres to be irrigated).....

(b) Stockwater (state number and kinds of animals to be watered).....

(c) Other use (describe fully under "No. 12. Remarks").....

(d) Power:

(1) Horsepower developed.....

(2) Point of return of water to stream.....

5. The water is to be diverted from its source at the following point: NW 1/4 NW 1/4 Section 8, T24N,.....

R37E, MDB&M, or at a point from which the NW corner of Section 5, R37E, MDB&M, bears N 08° 18' 12" W 6343.4 feet  
Describe as being within a 40-acre subdivision of public survey, and by course and distance to a section corner. If on unsurveyed land, it should be stated.

6. Place of use Section 32, T24N, R37E, MDB&M, Sections 5, 6, 7, 8, 17, 18, 19, 20, T24N, R36E, MDB&M.  
Describe by legal subdivision, if on unsurveyed land it should be so stated.

7. Use will begin about January 1 and end about December 31, of each year.  
Day and Month Day and Month

8. Description of proposed works. (Under the provisions of NRS 535.010 you may be required to submit plans and specifications of your diversion or storage works.) Drill well to approximately 6000 feet, install casing and cement back to surface to protect fresh water zones. Hot water or steam will flow through pipeline to electric plant.  
State manner in which water is to be diverted, whether by dam or other works, whether through pipes, ditches, flumes, or other conduits.

- 9. Estimated cost of works..... \$500,000
- 10. Estimated time required to construct works..... Two Years
- 11. Estimated time required to complete the application to beneficial use..... Five Years
- 12. Remarks: For use other than irrigation or stock watering, state number and type of units to be served or annual consumptive use.

This application is for a geothermal well with a production of 2.1 million gallons per day. The withdrawal will be 2352 acre feet per year; however, the high temperature water would be flashed with the net effect of 210,000 gallons per day being beneficially used and the remaining water returned to the reservoir so only 235 acre feet per year is actually used. This application is comingled with the other applications.

Applicant..... Sunoco Energy Development Company

By s/ Richard W. Arden

Compared..... lp/ga

b1/bc

Richard W. Arden, Agent  
950 Industrial Way  
Sparks, Nevada (89431)

APPROVAL OF STATE ENGINEER

This is to certify that I have examined the foregoing application, and do hereby grant the same, subject to the following limitations and conditions:

This permit is issued subject to existing rights. It is understood that the amount of water herein granted is only a temporary allowance and that the final water right obtained under this permit will be dependent upon the amount of water actually placed to beneficial use. It is also understood that this right must allow for a reasonable lowering of the static water level. If the well is flowing, a valve must be installed and maintained to prevent waste. A substantial weir or other type of measuring device must be installed and measurements of water use kept. This source is located within an area designated by the State Engineer, pursuant to NRS 534.030. The State retains the right to regulate the use of the water herein granted at any and all times.

There are to be no perforations in the well for at least the first 5000 feet. The well is to be cemented from the 5000 foot level to the surface to protect fresh water zones. The total water-steam equivalent to be withdrawn from this geothermal ground water reservoir under Permits 35156 through 35191 is limited to 2352 acre-feet of water annually.

This permit is further issued subject to the condition that the power or energy generated by the beneficial use of this water or steam is subject to recapture and use within the boundaries of the State of Nevada when the need arises.

The amount of water to be appropriated shall be limited to the amount which can be applied to beneficial use, and not to exceed 3.25 cubic feet per second, but not to exceed 2352 acre-feet annually.

Actual construction work shall begin on or before..... January 18, 1979

Proof of commencement of work shall be filed before..... February 18, 1979

Work must be prosecuted with reasonable diligence and be completed on or before..... January 18, 1980

Proof of completion of work shall be filed before..... February 18, 1980

Application of water to beneficial use shall be made on or before..... January 18, 1985

Proof of the application of water to beneficial use shall be filed on or before..... February 18, 1985

Map in support of proof of beneficial use shall be filed on or before..... February 18, 1985

Commencement of work filed..... IN TESTIMONY WHEREOF, I ROLAND D. WESTERGARD  
 Completion of work filed..... State Engineer of Nevada, have hereunto set my hand and the seal of  
 Proof of beneficial use filed..... my office, this 18th day of JULY  
 Cultural map filed.....  
 Certificate No..... Issued..... A.D. 19 78  
 Recorded..... Bk..... Page.....

*[Signature]*  
State Engineer

*[Signature]*