

APPLICATION FOR PERMISSION TO CHANGE POINT OF DIVERSION, MANNER OF USE AND PLACE OF USE OF THE PUBLIC WATERS OF THE STATE OF NEVADA HERETOFORE APPROPRIATED

Date of filing in State Engineer's Office MAR 31 1986

Returned to applicant for correction APR 21 1986

Corrected application filed MAY 14 1986; Map filed MAY 14 1986 under 49802

The applicant Oxbow Geothermal Corporation

200 S. Virginia Street, Suite 450 of Reno Nevada 89501

Street and No. or P.O. Box No. City or Town State and Zip Code No.

hereby make application for permission to change the point of diversion and manner and place of use

of water heretofore appropriated under Permit #41897

(Identify existing right by Permit, Certificate, Proof or Claim Nos. If Decreed, give title of Decree and identify right in Decree.)

1. The source of water is Dixie Valley Geothermal Reservoir (underground)

2. The amount of water to be changed 3.25 second-feet

3. The water to be used for generation of electric power

4. The water heretofore permitted for Industrial, for heating purposes

5. The water is to be diverted at the following point NE 1/4 SE 1/4 Section 7 T24N R37E MDB&M.

From said point the SW corner of Section 7 T24N R37E MDB&M bears S 70° 00' 30" W

distance to a section corner. If on unsurveyed land, it should be stated. a distance of 4492.16 feet.

6. The existing permitted point of diversion is located within SE 1/4 SE 1/4 Section 24 T24N R36E MDB&M,

or at a point from which the NW corner of Section 5 T24N R37E MDB&M bears

N 17° 02' 29" E a distance of 21,000.1 feet.

7. Proposed place of use S 1/2 NE 1/4 and NE 1/4 SE 1/4 Section 7 T24N R37E MDB&M

Describe by legal subdivisions. If for irrigation state number of acres to be irrigated.

8. Existing place of use Section 32 T25N R37E; Sections 4-8, 17-21 T24N R37E; Sections

12, 13, 24 T24N R36E MDB&M.

Describe by legal subdivisions. If permit is for irrigation, state number of acres irrigated. If changing place of use and/or manner of use of irrigation permit, describe acreage to be removed from irrigation.

9. Use will be from January 1 to December 31 of each year.

10. Use was permitted from January 1 to December 31 of each year.

11. 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.)

Geothermal well drilled to approximately

10,000' and cased with cement to approximately 8000'.

12. Estimated cost of works \$1.7 million

13. Estimated time required to construct works 3 months

14. Estimated time required to complete the application of water to beneficial use..... 3 years

15. Remarks: For use other than irrigation or stock watering, state number and type of units to be served or annual consumptive use.

Drilling plan is attached. Proposed well is to be tied into 50 MWe power plant to be constructed in Dixie Valley by Oxbow Geothermal Corporation. An estimated 2352 acre feet per year will be withdrawn. Oxbow is developing a reinjection plan to return 75% of that amount to the reservoir.

By.....s/Lori L. Olsen
200 S. Virginia St., Suite 450
Reno, NV 89501

Compared.....bc/jm.....js/se.....

Protested.....

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 to change the point of diversion, manner of use and place of use of the waters of an underground source as heretofore granted under Permit 41897 is issued subject to the terms and conditions imposed in said Permit 41897 and with the understanding that no other rights on the source will be affected by the change proposed herein. 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 geothermal fluid herein granted at any and all times.

It is understood that the amount of geothermal fluid herein granted is only a temporary allowance and that the final right obtained under this permit will be dependent upon the amount actually placed to beneficial use. It is also understood that this right must allow for a reasonable decrease of fluid pressure and heat. The well shall be equipped and maintained to prevent any waste of the geothermal fluid. Accurate measurements must be kept of discharge of the production well and the amount of fluid injected into the injection well to determine the total amount of fluid diverted and consumed for a beneficial use.

(CONTINUED ON Page 2)

The amount of water to be changed shall be limited to the amount which can be applied to beneficial use, and not to exceed..... 3.25cubic feet per second .

Work must be prosecuted with reasonable diligence and be completed on or before..... November 21, 1989

Proof of completion of work shall be filed before..... December 21, 1989

Application of water to beneficial use shall be made on or before..... November 21, 1992

Proof of the application of water to beneficial use shall be filed on or before..... December 21, 1992

Map in support of proof of beneficial use shall be filed on or before.....

Completion of work filed..... APR 06 1988 IN TESTIMONY WHEREOF, I..... PETER G. MORROS, State Engineer of Nevada, have hereunto set my hand and the seal of

Proof of beneficial use filed..... 5-26-89 my office, this..... 21stday of..... November

Cultural map filed.....

Certificate No. 12906 Issued JUL 26 1991 A.D. 1986 [Signature] State Engineer

(PERMIT TERMS CONTINUED)

The production and injection well are to be cemented from the producing levels to the surface to protect fresh water zones. This permit is issued subject to the condition that only geothermal fluids are to be diverted and used beneficially for heating purposes and fresh, cold water aquifers are not to be diverted. The used geothermal fluids are to be returned to the source via the injection well. The issuance of this permit does not waive the requirements that the permit holder obtain other permits from State, Federal and local agencies. A detailed log on the injection well and/or other analyses of the system used for returning the used geothermal fluids to the source must be submitted together with the Proof of Completion.

An annual report for this well must be filed under this permit describing the amount of geothermal fluid diverted and consumed to a beneficial use for the calendar year. This report must detail the amount of fluid produced and injected.

The total withdrawal of the geothermal fluid shall be limited to 2,353 acre-feet per year but the total consumptive use of the geothermal fluid is limited to only incidental fluid losses in the system and in no case shall it amount to more than 10% of the volume withdrawn annually. The State Engineer does not waive the right to make a determination of incidental fluid losses at any time and impose additional conditions thereto. This permit is further issued subject to the provisions of NRS 533.372(1) and with the understanding 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.

This Permit does not extend the permittee the right of ingress and egress on public, private or corporate lands.

The total combined consumptive duty of geothermal fluid under Permits 36931, 41892, 41914, 41920, 41923, 41929, 43050, 43051, 43052, 43557, 46951, 47142, 47322, 47323, 48932, 48933, 48934, 48935, 49572, 49573, 49574, 49644, 49802, 49803 and 49806 shall not exceed 10,704 acre-feet annually.