

DOROTHY A. TOWNE ET AL.

IBLA 90-137

Decided June 8, 1990

Appeal from a decision of the Nevada Associate State Director, Bureau of Land Management, approving application for permit to recomplete geothermal well NV 28-32 on geothermal lease N-12085.

Affirmed.

1. Rules of Practice: Appeals: Standing to Appeal

To establish standing to appeal under provision of 43 CFR 4.410 one must be a party to the case and must allege to have an adversely affected recognizable interest. Where one has shown that, prior to approval of an application to drill a geothermal well, objection was stated in writing to the drilling, and on appeal it is urged that such drilling will damage domestic water sources, one has standing to appeal.

2. Geothermal Leases: Generally--Geothermal Leases: Drilling--Geothermal Leases: Environmental Protection: Water Quality and Other Environmental Qualities--Geothermal Resources

A decision to approve an application for permit to drill a geothermal well will not be disturbed on appeal where it is not shown that there is a connection between water wells alleged to be affected by such drilling and the geothermal resource. Where the record establishes that other factors unrelated to the geothermal drilling may be the cause of damage to the water wells, the Secretary is entitled to rely on his experts in the field who are of the opinion that the drilling will not result in contamination of groundwater supplies or otherwise harm the environment.

APPEARANCES: Dorothy A. Towne, Reno, Nevada, pro se; Lynn M. Cox, Esq., William M. Wirtz, Esq., Acting Regional Solicitor, Office of the Solicitor, Pacific Southwest Region, Sacramento, California, for the Bureau of Land Management; William D. Douglass, Esq., Law Offices of Daniel R. Walsh, Carson City, Nevada, for Yankee Caithness Joint Venture Limited Partnership; Edward Stephenson, Vice President, Steamboat Homeowners Association, Reno, Nevada; Donald Kitts, President, Pleasant Valley Homeowners, Reno, Nevada; Nelson Duchene, Steamboat Water Works, Inc., Reno, Nevada; Mr. and Mrs. Primo Quarisa, Reno, Nevada, pro sese; Bruce MacKay, Reno, Nevada, pro se.

OPINION BY ADMINISTRATIVE JUDGE ARNESS

Dorothy A. Towne and others 1/ have appealed from a decision of the Nevada Associate State Director, Bureau of Land Management (BLM), approving an application for permit to drill (APD), filed by Yankee Caithness Joint Venture Limited Partnership (YCJV), authorizing redrilling of existing geothermal well NV 28-32 on Federal Geothermal lease N-12085 near Reno, Nevada. YCJV has appeared in opposition to the appeal and filed motions to expedite consideration and to dismiss the instant appeal for lack of standing by appellants and because the appeal was not timely filed.

Well NV 28-32 was approved for drilling on June 4, 1987. As originally drilled, the well did not reach a geothermal resource and there was no production. On August 18, 1989, YCJV filed an APD seeking to plug the well and drill directionally 90 to 100 feet westerly from the original bore in an effort to reach a geothermal source. Another well drilled by YCJV on lease N-12085 produces from the geothermal resource; the lease is part of Steamboat Springs Geothermal Unit, established in 1985.

On November 3, 1989, BLM approved the APD to allow recompletion of well NV 28-32. In a Decision Notice, Supplement to Environmental Assessment, and Finding of No Significant Impact (decision), BLM described the work authorized to be done:

It is our decision to include the proposed re-drilling, test-ing, pipe installation and production of Geothermal Production Well 28-32 as part of the original Steamboat Hills Geothermal Project. The well was first approved for drilling on June 4, 1987. The well failed to hit the intended target and was not put into production. This decision includes using existing roads for access to the existing well, plugging the well with concrete at the 1410 foot depth and angle drilling at that depth 90 to 100 feet to the west. All work will be done on previously used areas with no new surface disturbance. In review of the proposed action and alternatives considered, the re-drilling and production of well 28-32 has no effect on the other alternatives considered, including the no-action alternative, nor does the change cause the potential environmental effects of the other alternatives considered to differ.

Id. at 1. The decision supplemented an environmental assessment (EA) prepared for the project referred to by the decision above, identifying four perceived issues raised by the APD:

1. The impact the project might have on the Area of Critical Concern (ACEC) down at the hot springs.

1/ The other appellants are Donald Kitts, Reverend Nelson Duchene, Mr. and Mrs. Primo Quarisa, and Bruce MacKay.

2. The impact the project might have on the endangered Steamboat buckwheat plant.
3. The impact the project might have on ground water.
4. The impact the project might have on air quality.

Id. It was concluded that these issues were adequately considered in the original EA and that no further elaboration of the EA was required by the recompletion of well NV 28-32. The supplemental EA observed, however, that "after informal consultation * * * the Fish and Wildlife Service has decided that formal consultation is not warranted at this time [concerning the endangered steamboat buckwheat] and that no impacts are likely from the proposed action." Id. It was BLM's conclusion that recompletion of well NV 28-32 posed no threats to the affected area not already considered when the original drilling was approved.

The general nature of the place where well NV 28-32 is located is described in a geologic report of the Steamboat Springs geothermal area provided on appeal:

The Steamboat Springs geothermal area, located approximately 20 miles north of Carson City, Nevada * * * includes areas of historically continuous hot spring discharge and geysering, and a designated Area of Critical Environmental Concern (ACEC). Near and within the ACEC, which occupies a portion of the main terrace * * * occur the endangered Steamboat Buckwheat plants. These plants occur in siliceous sinter and sinter-derived soils which are a product of thermal water discharge. Also located in the Steamboat Springs geothermal area are three regions of geothermal fluid production and injection via wells: the Steamboat Spa, located south of the main terrace, which utilizes thermal water for bathing; the Ormat Energy Systems, Inc. * * *-operated binary-type geothermal power plant located northwest of the main terrace and adjacent to the Mt. Rose Highway; and the Caithness Power, Inc. * * *-operated primary flash-type geothermal power plant, located southwest of the main terrace, near the crest of the Steamboat Hills.

D. Huntley, R.J. Collar, and M.L. Storey, Preliminary Report on Hydrologic Monitoring at the Steamboat Springs, Nevada, Geothermal Area, November 1, 1988, at 1.

Appellants argue that recompletion of well NV 28-32 will affect ground water used for domestic purposes. Their statement of reasons (SOR) alleges:

Individual homeowners have had such drastic changes in water quality that the insides of dishwashers are turning black because of chemical runoff. Domestic wells are becoming so hot that the

water kills lawns, shrubs, etc., and the water going into a Washoe County building is no longer fit for human consumption.

Id. at 1.

Appellants also argue that the proposed well NV 28-32 recompletion threatens the endangered steamboat buckwheat plant, Erigeron ovalifolium var. williamsiae, because the plant is sensitive to water level changes. Finally, appellants argue that expansion of YCJV geothermal operations should be stopped "until the existing impacts geothermal development [has] had on the area are more clearly understood and are mitigated" and seek a delay until a further study anticipated to be soon released can be obtained (Attachment to SOR at 2).

BLM answers that the record supports the decision to approve the APD. In support of this position, BLM has furnished a point-by-point refutation of appellants' arguments by Richard Hoops, a BLM physical scientist, which analyzes geothermal activity in the Steamboat Springs area as it relates to ground water. The Hoops study concludes that there is no physical connection between groundwater degradation, endangerment of rare plant species, and recompletion of well NV 28-32.

YCJV has filed an answer to the SOR, a motion to dismiss, and a request for expedited consideration of this appeal for reasons of economic hardship. YCJV states that lost electrical sales and heavy equipment rentals scheduled when APD approval was granted for recompletion of well NV 28-32 necessitate early consideration of this appeal. Under the circumstances of this case, we find that such consideration is warranted and have advanced the appeal on our docket. The Wilderness Society, 110 IBLA 67 (1989); Hoosier Environmental Council, 109 IBLA 160 (1989).

[1] Both BLM and YCJV have questioned appellants' standing to appeal. Our rules governing standing are summarized in Mark S. Altman, 93 IBLA 265 (1986), where we explained

43 CFR 4.410(a) provides that "[a]ny party to a case who is adversely affected by a decision of an officer of the Bureau of Land Management * * * shall have a right to appeal to the Board." To be a "party to a case" a person must have "actively participated in the decisionmaking process regarding the subject matter of [the] appeal." To be "adversely affected" by a decision "the record must show that appellants have a legally recognizable interest." The interest need not be an economic or a property interest; use of the land involved or ownership of adjoining land suffices. "Mere 'interest in a problem'" or "deep concern with the issues" involved, however, does not. The Board will not speculate why an appellant is concerned about a decision, i.e., what interest is adversely affected. Appellant must allege or the record must show an interest that is injured. A person must be both a party to a case and have an adversely affected recognizable

interest in order to have a right to appeal to the Board. If either element is lacking, an appeal must be dismissed. [Citations omitted.]

Id. at 265, 266.

It is clear that appellants are parties to the case: they participated in the decisionmaking prior to issuance of the decision under review, making known their opposition to drilling of the YCJV well for much the same reasons stated in the SOR now before us. ^{2/} Appellants have alleged that they will be adversely affected by recompletion of well NV 28-32, citing a "causative relation" between YCJV development activity and water level declines in some area springs and in Steamboat Creek. They state there have been changes in water level, temperature, and chemical content in their wells in the Steamboat Springs area, coincident to the YCJV drilling, and that monitoring is insufficient to evaluate how geothermal production may affect their domestic water wells. To support their conclusion that there is a connection between geothermal drilling and the lowering and contamination of their wells, appellants point out that 1985 flow tests on well PW-23-5, located one-quarter mile south of well NV 28-32, showed a "strong response on Dorothy Towne's domestic well located 1-1/2 miles to the north."

In our decision in In Re Pacific Coast Molybdenum Co., 68 IBLA 325 (1982), we stated that this Board would "be guided by judicial determinations on such matters" as the types of interests which have been deemed relevant and the concerns which are properly considered when deciding whether a party has standing to appeal. Id. at 332. Following this guidance, we must acknowledge that the Supreme Court considers "'an identifiable trifle is enough for standing.'" United States v. Students Challenging Regulatory Agency Procedures (SCRAP), 412 U.S. 669, 689 n.14 (1973). Appellants have alleged that, coincident with geothermal drilling by YCJV, their domestic water supply changed: it lowered and changed in chemical composition and temperature. We find this is a sufficient allegation of a recognizable interest to survive a motion to dismiss for lack of standing and to entitle appellants to a decision on the merits of their appeal. Mark S. Altman, supra; In re Pacific Coast Molybdenum Co., supra.

[2] We therefore consider the merits of this appeal. The issue properly before this Board, however, is narrow. Only a BLM decision to approve an APD for recompletion of well NV 28-32 is under review here, not the entire YCJV drilling operation or all geothermal development near Steamboat Springs. The decision on appeal approved issuance of an APD to redrill well NV 28-32 by directional drilling. The ultimate question

^{2/} While the standing of individual appellants has been challenged for differing reasons, it is clear that Dorothy A. Towne participated prior to the decision as a party to these proceedings and is entitled, as a "party to the case," to appeal approval of the APD. This being the case, the fact that the appeal may be maintained is established, subject to a showing that a recognizable interest has been injured, and considerations of administrative economy therefore make unnecessary an examination of each individual appellant's credentials.

before this Board is whether the APD was properly approved. Whether the buckwheat plant is endangered by recompletion of well NV 28-32 is first considered.

YCJV argues that there is no showing that recompletion of well NV 28-32 would lower the water table, as appellants assert, but that, even assuming there will be a lowering of the table, the buckwheat would not be adversely affected. The record establishes that the buckwheat plant grows in dry soils near mineral springs. The plant does not do well, however, in soil that is wet. Reports by Clare Mahannah, a civil engineer and hydrologist and Timothy Durbin, a former employee of Geological Survey, are quoted to support this analysis of the plant's growing characteristics, an analysis which appellants do not deny. From this foundation, YCJV contends that

operating under the assumption that [drilling will lower the groundwater table] then those [YCJV] operations have actually increased the chances of survival of the buckwheat. The drying out of the soil would create additional areas for the proliferation of the buckwheat.

(YCJV Answer at 12). There is no contrary evidence in the case file, nor have appellants argued otherwise. We find, therefore, that there is no proof that approval of recompletion of well NV 28-32 will have any adverse effect on the buckwheat plant.

Neither YCJV nor BLM denies that the conditions described by appellants in their domestic water supplies exist. It is assumed therefore, that there have been undesirable water level, chemical, and temperature changes in their wells. The question is whether there is evidence tending to show that recompletion of well NV 28-32 can reasonably be expected to have any effect on those wells. There are a number of hydraulic reports in the case file before us. Appellants, as well as BLM and YCJV, rely on them, although appellants deny the available reports offer conclusive proof concerning the issue they seek to raise about the effect of geothermal development on their domestic water supply.

BLM has furnished a response from a staff scientist to the statements concerning groundwater contamination made by appellants' SOR (the Hoops Study, cited supra). This report, dated February 2, 1990, incorporates references from prior reports concerning groundwater hydraulics of the Steamboat Springs area in relation to geothermal activity and development. After discussing the geology of the area, the report considers how the area groundwater system functions within the environment described. It is concluded that "[p]recipitation is the primary factor in supplying recharge to the system" (Hoops Study at 3). After considering the history of rainfall over the last 20 years in the Steamboat and Reno areas, Hoops concludes that there has been a recent net rainfall deficit for the area. He concludes that this factor significantly affects the groundwater system and that

[t]his less than average precipitation equates to a 20% reduction in water available to recharge aquifers in the Steamboat area.

This effect is compounded during periods of prolonged dry weather since much of the rainfall that does occur will be held in local capillary attraction and will not be allowed to migrate to recharge aquifers as normal.

(Hoops Study at 4). Hoops then considers the possibility that the groundwater system may be connected to the YCJV well production zone by geologic formations earlier described. He observes that terraces where natural geothermal discharge occurs at Steamboat Springs can be affected by groundwater levels. He states, in this connection, that

the production zones are not in good communication with the spring terraces. The [YCJV] wells produce from depths averaging 2500 feet below ground level, and inject into a zone at about 1800 feet. These zones are geologically isolated from the aquifers found in the alluvium occurring throughout the area. The [existing YCJV] injection well is in strong pressure communication with the production wells. * * * The production wells have not experienced a pressure decline. Such a decline would indicate either less fluid in the reservoir or that the fluid in the reservoir is cooling.

Id. at 5.

Hoops then describes the situation of two other users of the geothermal resource, a commercially operated spa and a seven-megawatt binary power plant, both operating in the Steamboat Springs area. He concludes that the spa, because it draws its water from shallow wells in the vicinity, may affect the other groundwater users "[g]iven the proximity of the spa well to the main terrace and their being lower in elevation." Id. at 7. It is also possible that the binary power plant may have some effect on groundwater supply and quality because of the connection of the geothermal spring terraces and because "[t]he geothermal fluids produced to the [power] plant are from near surface aquifers in extremely close proximity to the faults supplying geothermal fluids to the high terrace." Id. at 7.

After reviewing the history of development of geothermal resources in the Steamboat Springs area since 1987 and describing a regional hydrologic monitoring program developed in cooperation between State, BLM, and local governments, which is said to include a future report by Geological Survey, Hoops concludes that

there are numerous naturally occurring factors which professionals believe can influence spring discharge to a much larger extent than geothermal development can. Two other geothermal facilities, located closer to, and in much greater communication with the ACEC springs, are much more likely to reduce spring discharge than the [YCJV] operation. There are strong indications that the magnitude of domestic ground water production in the immediate area is

causing a draw down of near surface ground water. This has the double effect of reducing recharge from this source to the springs and also lowering the near surface ground water quality by increasing the mixing of geothermal fluids.

Id. at 10.

The Geological Survey report referred to by Hoops is the same report for which appellants contend resolution of this appeal should be delayed. There is no showing by them, however, that this report will do more than supplement the existing body of knowledge concerning the complex hydrology of the Steamboat Springs area. Appellants do not challenge the analysis offered by the Hoops report and have not responded to it. On the record before us, therefore, as YCJV contends, there is no evidence that there is any communication between the precious geothermal wells drilled by YCJV or the proposed recompletion of well NV 28-32 and the domestic water supply of appellants. As the Hoops study summarizes the various prior hydraulic studies of the Steamboat area, there is a considerable distance between the groundwater table and the YCJV geothermal wells, both existing and proposed by the APD, which are completed more than a 1,000 feet below the domestic wells. There has been a regional dry trend. Domestic water use has increased. Other commercial users of hot springs in the area and another nearby power plant put demands on the groundwater table that can directly affect appellants' wells.

These circumstances indicate that there are other explanations for the changes in the domestic wells observed by appellants which are more direct and perceptible than the expected effects of well NV 28-32 have been shown to be. On the record before us there is simply no showing that there is any connection between well NV 28-32 and the domestic water supply used by appellants. Nor is there any indication that the analysis by BLM of reasons supporting approval of the APD for well NV 28-32 was incorrect.

Appellants argue that there is not enough evidence in the studies already completed to support approval of the APD for well NV 28-32, and that the evidence gathered thus far shows that further study should be made of the complex geology and hydraulics of the Steamboat region before approval of the APD is granted. It is pointed out that the expected Geological Survey study may soon issue, and that recompletion of well NV 28-32 should wait until that study had been issued and studied by the decisionmaker.

This argument is not without appeal. Nonetheless, the burden in cases such as this is on the appellant to show by a preponderance of the evidence of record that there has been error in the decision under review that warrants relief. Bender v. Clark, 744 F.2d 1424 (10th Cir. 1984). In cases involving evaluation of expert opinion such as the opinion of geologists who have described geologic formations that are believed to exist beneath the earth's surface, we have consistently found that the Secretary may rely on the reports of his technical experts in the field, even where the evidence is conflicting or contradicted, unless such opinions are shown to be in error. Bruno D'Agostino, 106 IBLA 155 (1988); Wilfred Plomis,

104 IBLA 34 (1988); Eilleen Scully, 104 IBLA 42 (1988); Richard E. O'Connell, 98 IBLA 283 (1987). Appellants have shown no reason to doubt that the evidence of the geology of the Steamboat area was correctly evaluated by BLM. BLM has concluded, relying on expert opinion, that delay for further study is not warranted in this case. We find that the record before us reasonably supports the decision to approve the APD for well NV 28-32.

Therefore, pursuant to the authority delegated to the Board of Land Appeals by the Secretary of the Interior, 43 CFR 4.1, the decision approving the APD for well NV 28-32 is affirmed.

Franklin D. Arness
Administrative Judge

I concur:

David L. Hughes
Administrative Judge