

ORIGINAL

Decision No. 81230

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

BERNARR WILLIAM HEYNE and
LANITA JANE HEYNE,

Complainants,

vs.

RAY PERRY dba RAY PERRY WATER
SERVICES and
R. J. BAUMHAUSSER,

Defendants.

Case No. 9432
(Filed August 25, 1972)Bernie Heyne and Raymond A. Maechler, for complainants.
Ray A. Perry, for himself, defendant.Victor T. Lamb, Attorney at Law, for defendant
Baumhausser.Leslie D. Hay, for himself, interested party.
James M. Barnes, for the Commission staff.

O P I N I O N

Complainants Bernarr (Bernie) William Heyne and Lanita Jane Heyne seek an order requiring defendants Ray Perry and R. J. Baumhausser to improve the Perry Water Service system and the maintenance program thereof so that it will provide a year-round adequate supply of water, free of sediment, odor, and air. Complainants also seek relief from restrictions against use of water for irrigation.

This matter had been held in abeyance at the request of complainants. Public hearing was held before Examiner Catey at Sonora on February 26, 1973. Testimony was presented by both complainants, by another water customer, by the manager of a nearby water district, by both defendants, and by a Commission staff engineer. The matter was submitted on February 26, 1973.

Complainants and Defendants

Complainants are residents of the Oak Garden Estates subdivision near Soulsbyville in Tuolumne County.

Defendant Perry is the owner and operator of the water system serving complainants and approximately 19 other customers within a service area consisting of the 39-lot Oak Garden Estates subdivision and four contiguous parcels.

Defendant Baumhausser is the developer of Oak Garden Estates subdivision. He was the original owner of the water system which he installed to serve the subdivision. Decision No. 79100 dated August 31, 1971 in Application No. 52652 authorized the transfer of the water system to Perry. The requirements of that decision were completed on October 27, 1971. Under the provisions of the decision, Baumhausser has been relieved of all further public obligations in connection with the operation of the water system. The complaint therefore must be dismissed insofar as it relates to Baumhausser.

Taste, Odor, and Color

Complainants testified that the water supplied by Perry's two wells has a disagreeable taste, odor, and color. A chemical analysis of the water in 1967 revealed an iron content of 0.76 mg/L, which is more than double the maximum recommended in the Drinking Water Standards of the United States Department of Public Health. The staff concluded that the taste, odor, and color could be related to the high iron content, and recommended that Perry be required to have further analyses made of the well water and to submit copies of the analyses to the Commission.

We will adopt the staff's suggestion but, unfortunately, there appears to be no economically feasible direct means to reduce the iron concentration. The staff investigation indicates that iron and manganese are commonly found in other local ground water sources, so drilling of new wells presumably would not be of much benefit. Treatment of the water from the present sources to reduce the iron

content would be very expensive. Rather than to attempt to remove iron from the present well water, it would probably be more economical to dilute the present supply with water obtained from other purveyors who have a source with better quality. This is discussed hereinafter under the heading "Inadequate Supply".

Sediment and Air

Complainants testified that the water frequently has sediment and air mixed with it. The staff investigation indicated that the blasts of air and sediment in the lines could possibly have been caused by a shallow-well pump breaking suction. The staff recommends that pump controls be made inaccessible to the public, that the controls be made automatic, and that flushing and tank-cleaning schedules be established.

Perry testified that all of the pump controls are locked except for the main switches. He is of the opinion that safety laws prohibit the locking of a main switch but could not cite the specific rule or law involved. It does not seem reasonable that there could be any prohibition against locking a main switch in the open (off) position. The order hereinafter requires that locks be provided but permits the switches to be left unlocked when in the closed position, provided Perry furnishes documentary evidence that safety authorities require this.

The Commission staff suggested the use of a time clock on the well that introduces air in the system so that the pump would not stay on for long enough periods to draw the surrounding water table too low. Perry testified, however, that the drawdown was quite rapid, which would require very short cycles of "off" and "on" positions of a time clock control. He suggested, as an alternative, that he install a throttling valve to keep the pump production rate from exceeding the well recharge rate. As an added precaution, he proposes to add an air trap which would collect and vent any small amount of air which might still be pumped. The order hereinafter permits Perry to utilize either the staff's plan or his own for eliminating the air problem.

Inadequate Supply

Complainants had requested immediate relief from the utility's invoking its tariff provisions which permitted rationing or curtailed use of water during an emergency shortage in July and August 1972. The utility's action was, however, in accordance with its tariff obligations to all users and the restriction was lifted in September 1972.

The immediate cause of the shortage was apparently a leak in a 2-inch water main located in an area infrequently visited and not visible from traveled streets. Although the leak has been repaired and normal service resumed, there are some underlying deficiencies which contributed to the shortage. If the sources of supply had been metered as required by Section II.4.a. of General Order No. 103, the abnormal production of water would have been apparent and the leak could have been found and repaired sooner. If the customers' services were metered, the average use per customer would be lower, because of less waste, and the storage tanks would have refilled sooner after the leak had been repaired. Finally, if the yield from the two wells had not fallen over a period of years, adequate service could have been provided even to flat-rate customers.

Corrective measures recommended by the staff are for Perry to install meters on the sources of supply, to institute a program of installing meters on customers' services (commencing with the heaviest users), to have efficiency and productivity tests performed on the two well pumps, to investigate the feasibility of increasing the local supply or obtaining water from other suppliers, and to provide adequate burial of exposed pipes to prevent damage and resulting leaks.

Perry contends that meters on the sources of supply would be redundant after he meters all services. This is not correct, because a certain amount of water will be lost in flushing, fire protection, and leaks. The well meters will provide a means of detecting abnormally large quantities of unaccounted-for water.

Perry agrees that all services on his system should be metered. He plans to commence the meter installations soon. His tariffs already include rates applicable to metered service.

The Commission staff engineer testified that well pump efficiency tests will be made by Pacific Gas and Electric Company upon request. Those tests should be deferred, however, until the master water meters are installed on the pump lines, to facilitate measuring pumping rates.

The staff suggests that a supplemental supply of water might be obtained from other purveyors in the general area, but points out that the two nearest such sources are, respectively, 3,700 feet and two miles away. The manager of Tuolumne County Water District No. 2 testified that an upcoming bond election for expansion of the district's system might result in greatly shortening the distance from Perry's system to the district mains. Perry also is investigating the possibility of purchasing water from a mutual water company to supplement his well supply. The order hereinafter requires Perry to continue to investigate alternative sources.

Perry has eliminated some of the shallow mains and testified that most of the mains now have adequate cover, although some portions will not be quite as deep as specified in General Order No. 103.

Findings

1. Defendant Baumhausser is no longer owner or operator of the water system serving complainants Heyne.
2. Defendant Perry is the owner and operator of the water system serving complainants.
3. The water supplied to complainants and other customers by Perry has objectionable odor, color, sediment, and entrained air.
4. During the summer of 1972, Perry was unable to provide an adequate supply of water to complainants and other customers, primarily because of an undetected leak in a main, which has since been repaired.

5. Contributing factors to the previous and potential future lack of sufficient water are: (a) no meters on well sources, (b) flat-rate service requires more water than metered service, (c) the two wells' productivity has declined, (d) no standby or supplemental source is yet available, and (e) some pipes are not buried deep enough to prevent damage.

The Commission concludes the complaint should be dismissed insofar as it relates to defendant Baumhausser and that defendant Perry should be required to carry out the staff's recommendations set forth in Exhibit No. 7, with minor modifications.

O R D E R

IT IS ORDERED that:

1. The complaint is dismissed insofar as it relates to defendant R. J. Baumhausser.
2. Within one month after the effective date of this order, defendant Ray Perry shall:
 - a. Install meters on both of his well sources of supply.
 - b. Commence a program for the installation of meters on all customers' services, starting with the largest users and completing the program within two years.
 - c. Lock all pump structures, controls, and switches to prevent tampering by unauthorized persons, except that if safety authorities prohibit locks on closed master switches, the master switches shall be locked only when in the open position and Perry shall file in this proceeding a written statement by the appropriate safety authority of the applicable safety regulation.
 - d. Institute a program of flushing all lines and dead-ends at least once a month, keeping a record of dates and locations of flushing.
 - e. Institute a program of cleaning both storage tanks semiannually, or more frequently if conditions warrant, keeping a record of dates of cleanings.

- f. Institute and maintain a legible log of all maintenance performed on the system, showing dates and brief descriptions of work performed.
- g. File in this proceeding a statement of compliance with the foregoing items 1.a. through 1.f.

2. Within two months after the effective date of this order defendant Ray Perry shall:

- a. Commence a two-year program of filing in this proceeding monthly reports of quantity produced and available rate of flow, from each source, for the preceding month.
- b. Obtain pump tests on both wells, showing sustained yields, and file in this proceeding a copy of the results of each test.

3. Within six months after the effective date of this order, defendant Ray Perry shall:

- a. Have a chemical analysis of both of his present well water supplies made by a qualified laboratory and file in this proceeding a copy of the results of each analysis.
- b. Perform a pressure survey of the system, file in this proceeding a summary of the results of the survey, and thereafter perform additional surveys and record the pressures in accordance with General Order No. 103.
- c. Provide air prevention controls, or a suitable throttle valve and air trap tank, at the well which has introduced air into the water system.
- d. Provide automatic start and shutoff controls for the pump in the shallow well.
- e. File in this proceeding a statement of compliance with the foregoing items 3.c. and 3.d.

4. Within one year after the effective date of this order, defendant Ray Perry shall:

- a. Lower and cover any mains which are likely to be damaged because of inadequate depth, and file in this proceeding a statement of the length, size, and general location of mains involved.
- b. Investigate the feasibility of obtaining supplemental water from other sources, and file in this proceeding a statement of the results of the investigation.

The effective date of this order shall be twenty days after the date hereof.

Dated at San Francisco, California, this 3rd day of APRIL, 1973.

Vermon L. Stinson
President
William J. Quinn
John J. Quinn
Sam J. Quinn
Robert J. Quinn
Commissioners