

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

In the Matter of the Petition of the
Department of Fish and Game for Review
of Order No. 74-15 (NPDES No. CA0005673)
of the California Regional Water Quality
Control Board, Central Coast Region.

Order No. WQ 75-12.

BY THE BOARD:

The Department of Fish and Game (petitioner) has submitted a petition to the State Water Resources Control Board (State Board) requesting a review of Order No. 74-15 adopted by the California Regional Water Quality Control Board, Central Coast Region (Regional Board), on March 8, 1974. Order No. 74-15 prescribes waste discharge requirements for the California-American Water Company, Carmel Valley Filter Plant, Monterey County.

STATEMENT OF FACTS

California-American Water Company, operates a 7.5 mgd water filtration plant, the Carmel Valley Filter Plant, as part of a municipal water supply. The present discharge consists of 0.25 mgd filter backwash which is discharged intermittently into the Carmel River, at a location two miles south of the community of Carmel Valley. The Carmel River is an intermittent freshwater stream with a 14-year average flow of 74.1 cubic feet per second (cfs) and zero flow for the months of August, September, October, and

November. The Carmel River is used by steelhead trout for migration and reproduction. Due to the intermittency of the receiving water, this discharge would constitute the major source of flow in Carmel River during low flow periods. The beneficial uses of the Carmel River, as listed in Order No. 74-15, include agricultural supply, industrial supply, municipal supply, recreation, wildlife and fish habitat, and groundwater recharge.

On January 21, 1974, the Regional Board transmitted a copy of the proposed waste discharge requirements to all interested parties and invited comments. The Department of Fish and Game responded by letter dated March 6, 1974, in which it presented recommendations regarding proper requirements for California-American Water Company. A representative of the Department of Fish and Game reiterated the recommendations at the public hearing before the Regional Board on March 8, 1974.

CONTENTIONS AND FINDINGS

The sole contention of the petitioner and our findings relative thereto are as follows:

Contention:

Petitioner contends that the allowable level of chlorine residual specified in Order No. 74-15 is too high and would significantly harm the fish and aquatic life of the Carmel River.

Findings:

Effluent Limitation A-1 prohibits discharge of chlorine residual in excess of a quarterly average of 0.5 mg/l and limits instantaneous maximum chlorine residual to 1.0 mg/l. Effluent Limitation A-5 prohibits the discharge of wastewater containing harmful concentrations of substances which are toxic or otherwise detrimental to human, animal, plant, bird, fish, or other aquatic life. Receiving Water Limitation B-7 provides that the discharge shall not adversely alter the diversity or abundance of aquatic life.

As we have previously pointed out,¹ there is no real dispute that a chlorine residual of 0.5 mg/l can be harmful to fish and aquatic life. The discharge of wastewater with a chlorine residual in the amount permitted by Order No. 74-15 could violate Effluent Limitation A-5 and Receiving Water Limitation B-7 of the same Order.

Additionally, our review of the Regional Board records discloses data which indicates that this particular discharger has historically produced an effluent with a substantially lower chlorine residual than that permitted by Order No. 74-15. This data is summarized as follows:

1. See Order No. WQ 75-6

<u>Sampling Period</u>	<u>No. of Samples</u>	<u>Total Chlorine Residual mg/l</u>
4/74	5	trace
	1	0.1
	1	0.35
5/74	5	0.0
	3	trace
6/74	8	0.0
7/74	6	0.0
	2	trace
8/74	9	0.0
	1	trace
9/74	7	0.0
	1	trace

From the available data it appears that, historically, the discharge has had a median total chlorine residual of 0.0 mg/l.

While it is unlikely that California-American Water Company would increase the chlorine residual level of filter backwash discharge to the levels permitted by the current discharge requirements, it is not good practice to permit discharges of pollutants in excess of the levels attainable through appropriate and reasonable control technology. It seems obvious from the record that California-American Water Company can, and in fact does, meet much more stringent chlorine residual levels than those presently set forth in Order No. 74-15.

There is no evidence in the record that the actual chlorine residual of this particular discharge has resulted in any prior detriment to the beneficial uses of the Carmel River, including the beneficial use of fish and wildlife habitat. At the same time, there is insufficient evidence in the record from which we may judge the extent of the beneficial use for fish and wildlife habitat. The petitioner did not present sufficient evidence for us to judge the appropriate chlorine residual limitation to be imposed on this particular discharge. While apparently there is no doubt that there is a fishery to be protected in the Carmel River, the limitation to be imposed on chlorine residual depends to some extent on the nature of the fishery, the time or times of year when utilized for this beneficial use, flows in the river during the critical time or times of the year, prior difficulties experienced by reason of this particular discharge if any, and such other data as may be necessary to permit the Regional Board to establish an appropriate chlorine residual limitation.

We also note that Order No. 74-15 in its present form does not contain a monitoring program which would assure compliance with Effluent Limitation A-5 and Receiving Water Limitation B-7. Assurance of compliance with these requirements and limitations can be had in one of two ways: (1) by establishing a chlorine residual below toxic levels, or (2) by requiring appropriate toxicity bioassays.

CONCLUSIONS

After review of the record, and consideration of the contention of the petitioner, and for the reasons discussed, we have concluded the action of the Regional Board in adopting Order No. 74-15 was inappropriate and improper because (1) Order No. 74-15 permits the discharge of an effluent with a chlorine residual which may be harmful to fish and aquatic life and which is substantially in excess of the technical ability of the discharger to control, and (2) the monitoring requirements of Order No. 74-15, as that Order is presently framed, are not sufficient to assure protection of beneficial uses and compliance with requirements. In view of the insufficiency of the evidence in the existing record, the Regional Board should rehear and reconsider appropriate waste discharge requirements for California-American Water Company at its Carmel Valley Filter Plant.

NOW, THEREFORE, IT IS ORDERED that Order No. 74-15 is remanded to the Regional Board for rehearing and reconsideration of waste discharge requirements and for action consistent with the findings and conclusions of this order.

Dated: April 17, 1975

/s/ W. W. Adams
W. W. Adams, Chairman

/s/ W. Don Maughan
W. Don Maughan, Vice Chairman

/s/ Roy E. Dodson
Roy E. Dodson, Member

/s/ Mrs. Carl H. Auer
Mrs. Carl H. (Jean) Auer, Member

