

STATE OF CALIFORNIA  
STATE WATER RESOURCES CONTROL BOARD

In the Matter of the Petition of the )  
Cities of South San Francisco and )  
San Bruno for Review of Order No. 72-50 ) Order No. WQ 73-6  
of the California Regional Water Quality )  
Control Board, San Francisco Bay Region )  
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On October 2, 1972, the Cities of South San Francisco and San Bruno (hereinafter "the Cities") filed an amended petition requesting review of Order No. 72-50 adopted by California Regional Water Quality Control Board, San Francisco Bay Region (Regional Board), on August 10, 1972, ordering the Cities to cease and desist violating waste discharge requirements and prohibiting the discharge of additional industrial wastes to the Cities' sewer system until an adequate industrial ordinance has been adopted and implemented.

The petition requests the State Board to review and find inappropriate and improper the Regional Board's action in adopting Order No. 72-50 on the basis that the Regional Board, at its regular meeting on August 10, 1972, adopted the recommendation of a hearing panel without making an independent review of the record of proceedings before the hearing panel. In addition, the petition requests the State Board to find inappropriate and improper the Regional Board's action in prohibiting additional industrial discharges to the Cities' sewer system until an adequate industrial source control ordinance is adopted and implemented on the basis that such action was arbitrary and unsupported by the evidence.

The State Board, having considered the petition and record of proceedings before the Regional Board finds:

1. The Cities together operate a secondary (activated sludge) wastewater treatment plant which presently discharges approximately 8 mgd of wastewater into Colma Creek.

2. On December 22, 1970, the Regional Board adopted Resolution No. 70-101 prescribing waste discharge requirements for the Cities including the following requirements:

"2. The discharge shall not:

a. Unreasonably affect any of the protected beneficial water uses resulting from:

Floating, suspended, or deposited macroscopic particulate matter or foam in waters of the State at any place ...

Alteration of ... turbidity, or apparent color beyond present natural background levels in waters of the State at any place.

...

The waste as discharged to waters of the State shall meet these quality limits at all times:

1. In any grab sample:

pH	7.0 minimum
	8.5 maximum

...	
Coliform organisms	240 MPN/100 ml, median of five consecutive samples, maximum

	10,000 MPN/100 ml, any single sample when verified by a repeat sample taken within 48 hours, maximum
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...

2. In any representative set of samples:

Toxicity: survival of test fishes in 96-hour bioassays of the waste as discharged.

Any determination 70% minimum

Average of any three or  
more consecutive determi-  
nations made during any  
21 or more days 90% minimum"

3. The evidence in the record before the Regional Board establishes violations of requirements prescribed for:

- a. Floating particulate matter in the receiving water.
- b. Turbidity and apparent color in the receiving water.
- c. Effluent pH.
- d. Effluent toxicity.

With respect to the specific contentions raised by the petition, the Board further finds:

Contention: The prohibition of additional discharges of industrial waste to the Cities' sewer system was arbitrary and unsupported by the evidence.

Findings:

Waste effluent from the Cities' plant failed to meet the toxicity requirement based on samples taken during each of the months of January through July 1972, according to the Cities' "Self-Monitoring Reports" and the Regional Board staff's "Checking Program Reports". In fact, fish survival in each of these samples of undiluted waste was 0% according to these reports.

There being evidence of substantial toxicity violations, it was the conclusion of the Regional Board staff that toxic constituents in industrial waste discharged to the Cities' sewer system was the most likely cause of toxicity violations. This conclusion was based on evidence excluding other possible toxicity sources as the cause of toxicity violations.

Of other possible toxicity sources, staff testimony ruled out domestic waste discharged to the Cities' sewer system as the cause of effluent toxicity. Toxicity associated with domestic waste in the influent to the Cities plant typically contains ammonia and MBAS as toxic constituents. The plant should have removed most of such toxicity from the plant influent. This conclusion is borne out by Brown, Randall and Beck, A Study of Toxicity and Biostimulation in San Francisco Bay - Delta Waters, Vol. 1, which indicates that a secondary treatment plant with activated sludge, such as the type of plant operated by the Cities, should reduce ammonia and MBAS toxicity to 0.5 - 1.2 toxic units. The effluent from the Cities' treatment plant, however, contained toxicity concentrations, as calculated by Cook Research Laboratories on the basis of 4 samples obtained in February, 1972, of 2.5 toxic units - more than twice what one would expect from a secondary treatment plant with an activated sludge process.

Arguing against the staff conclusion which attributed the excessive effluent toxicity to industrial waste, representatives of the Cities testified that the Cities' plant, though designed as a secondary treatment plant, does not truly provide secondary treatment. To support their conclusion, representatives of the Cities offered evidence that BOD removal by the plant is also significantly below that to be expected from a typical secondary treatment plant. However, the fact that a secondary level of BOD removal is not being attained in a plant designed for secondary treatment and operating below its hydraulic capacity may itself be evidence of interference with biological treatment processes caused by toxic constituents in influent industrial waste.

Of other possible toxicity sources, Regional Board staff testimony also excluded chlorination as a cause of toxicity requirement violations since toxicity concentrations in the Cities' plant effluent before and after chlorination, as calculated by Cook Research Laboratories on the basis of the four samples obtained in February, 1972, showed only minor increases in toxicity concentrations after chlorination.

The conclusion that toxic constituents in industrial waste discharged to the Cities' sewer system is the cause of toxicity requirement violations is also supported by the presence of toxic amounts of cyanide and lead in the Cities' plant effluent. Both of these toxic constituents are usually found only in industrial waste discharges.

This Board finds, therefore, that there is substantial evidence in the record to support a finding that the violation of toxic requirements by the Cities is caused by industrial waste discharges to the Cities' sewer system and that additional industrial waste discharges to a treatment plant unable to remove industrially caused toxicity will result in increased toxicity which will further unreasonably impair water quality.

This Board further finds that, since there was substantial evidence that additional industrial waste discharges will increase toxicity requirement violations and further unreasonably impair water quality, a ban on additional industrial discharges is appropriate under 23 Cal. Admin. Code § 2244(a).

The Regional Board, however, went further than just banning additional industrial discharges. In its order it provided that:

"Additional discharges of industrial wastes to the sewer system by dischargers who did not discharge into the system prior to the issuance of this order are prohibited until after the Cities of South San Francisco and San Bruno have adopted an industrial waste ordinance adequate to exclude persistent toxic materials to the greatest extent achievable by source control from entering the sewers in industrial waste and have staffed and financed a program adequate to implement the ordinance ..." [Emphasis added].

The only appropriate and proper standard on which to base the removal of prohibitions or restrictions on additional discharges is that set forth in 23 Cal. Admin. Code § 2244.3.

Order No. 72-50, however, conditions removal of the ban on additional industrial discharges only upon the adoption and implementation of an adequate industrial service control ordinance. While a well drawn and strongly enforced industrial source control ordinance would seem to be the most logical way for the Cities to prevent increases in violations of toxicity requirements and to ensure consistent compliance with requirements, the Cities cannot be foreclosed from preventing increased violation of toxicity requirements or achieving consistent compliance with toxicity requirements by any other method, including increased level of treatment, if they so choose.

Contention: The Regional Board's action in adopting the cease and desist order was inappropriate and improper since the full Board did not review the record of proceedings before the hearing panel, there being no record of proceedings before the hearing panel then available.

Findings:

Water Code § 13302(b) in pertinent part provides:

"The board, after making such independent review of the record and taking such additional evidence as may be necessary, may adopt, with or without revision, the proposed decision and order of the panel." [Emphasis added].

The phrase "as may be necessary" applies to both the review of the record and the taking of additional evidence. The Regional Board, therefore, was not required by § 13302(b) to review and consider the record of proceedings before the hearing panel. Moreover, when adopting a hearing panel's proposed findings and order without change, due process does not require the Regional Board to review the record of proceedings before the hearing panel. [See Taylor v. Industrial Accident Commission, 38 CA2d 75, 85 (1940)].

Since the Regional Board's action approving the hearing panel's recommended findings and order is appropriate with or without reviewing the record, including the transcript of proceedings before the hearing panel, the finding in the Regional Board's order that "The [regional] board has independently reviewed the record at a special meeting held on August 10, 1972", while erroneous, is harmless error. This error was probably caused by the expectation that the transcript would be available at the time the recommended order was prepared when, as it turned out, the transcript was not available at the time the full Regional Board adopted the hearing panel's recommended order as its own.

### Conclusions

Based upon the record the State Board concludes that the action of the San Francisco Bay Regional Board in adopting Order No. 72-50 was appropriate and proper except the Regional Board should revise Order No. 72-50 to delete the provision conditioning removal of additional discharges upon the adoption of an adequate industrial waste ordinance.

IT IS HEREBY ORDERED that the California Regional Water Quality Control Board, San Francisco Bay Region, revise Order No. 72-50 consistent with the conclusions of this order.

Adopted as the order of the State Water Resources Control Board at a meeting duly called and held at Los Angeles, California.

Dated: March 1, 1973

*W. W. Adams*

W. W. Adams, Chairman

*Ronald B. Robie*

Ronald B. Robie, Vice Chairman

*E. F. Dibble*

E. F. Dibble, Member

*Roy E. Dodson*

Roy E. Dodson, Member

*Mrs. Carl H. Auer*

Mrs. Carl H. (Jean) Auer, Member