

STATE WATER RESOURCES CONTROL BOARD
RESOLUTION NO. 78-78

BOARD ACCEPTANCE OF FINAL REPORT: "DETERMINATION
OF MUTAGENICITY OF SELECTED CALIFORNIA WASTEWATERS",
PREPARED BY THE UNIVERSITY OF CALIFORNIA
(STANDARD AGREEMENT NO. W6-131-40)

WHEREAS:

1. On behalf of the State Board, the Executive Director executed Standard Agreement No. W6-131-40 with the University of California for a total of \$57,000 for a study of mutagenicity of selected California wastewaters. The purpose of the study was to adapt the bacterial mutagenicity test developed by Bruce Ames to applications in wastewater analysis and to test the adapted procedures on several wastewaters.
2. The University of California completed the work funded by the State Board and submitted a final report as required by Standard Agreement No. W6-131-40. The report presents the procedures for the use of the test with wastewaters and results for samples from six wastewater treatment plants. The results indicate that:
 - a. Wastewaters do contain compounds having significant mutagenic activity. This is the first documentation of such activity in wastewaters.
 - b. The greatest quantity of organic matter was found in the acidic component of a separation procedure, but the most potent mutagenic response was in the much smaller basic component.
 - c. A trend was noted of increasing mutagenic potency for more advanced treatment, through secondary processes and filtration. The reason for this is not known.
3. Although additional improvements are needed in methodology and in the interpretation of relative mutagenic potency responses, the results of the project provide significant advancement of methodology for screening wastewaters for health effects.

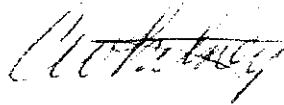
THEREFORE BE IT RESOLVED:

1. That the State Board accepts the final report "Determination of Mutagenicity of Selected California Wastewaters" in fulfillment of the Standard Agreement No. W6-131-40 with the University of California.

2. That the State Board authorizes printing of the report as a numbered technical report.

CERTIFICATION

The undersigned, Executive Director of the State Water Resources Control Board, does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the State Water Resources Control Board held on December 21, 1978.



Executive Director
(C. Whitney)