

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

In the Matter of Review of Action of)
the California Regional Water Quality)
Control Board, Lahontan Region,)
Regarding Adoption of Order No. 6-78-27,)
Waste Discharge Requirements for)
California Correctional Center,)
Susanville.)

Order No. WQ 79-8

BY THE BOARD:

On September 25, 1978, the State Water Resources Control Board voted to review on its own motion the action of the California Regional Water Quality Control Board, Lahontan Region, regarding adoption of waste discharge requirements for the California Correctional Center at Susanville. This review was undertaken at the request of the staff of the State Board's Division of Water Quality, because of concern over the relatively high cost of treatment facilities necessary to meet the Regional Board's waste discharge requirements. The proposed treatment facilities are being funded under the Clean Water Grant Program which is administered by the Division of Water Quality.

I. BACKGROUND

The California Correctional Center at Susanville is currently involved in a project to upgrade its wastewater treatment facilities. As part of this project, a direct discharge to the Susan River will be eliminated and effluent from a new

preaeration cell and oxidation/storage pond system will be applied to land by spray disposal. The waste discharge requirements established by the Regional Board for this spray disposal specify that the Center's effluent must be disinfected to meet 23 MPN/100 m/1 coliform before application to the disposal site. The disinfection facilities will add \$90,000 to the estimated cost of the Center's grant project. Mitigation measures to prevent aerosol drift caused by the spray irrigation from leaving the disposal site had previously been incorporated in the project by agreement with the State Department of Health. These mitigation measures include planting trees along the border of the disposal area to act as a windbreak, installation of a wind speed and direction indicator which will automatically shut down the irrigation equipment when necessary, and establishment of a 500-foot buffer zone around the perimeter of the disposal area. At the time when these mitigation measures were adopted, the State Department of Health was satisfied that disinfection was not necessary.

The disinfection requirement was included in the waste discharge requirements, contrary to the recommendation of Regional Board staff, when owners of property adjacent to the proposed disposal site presented information to the Regional Board indicating that there were a variety of professional opinions regarding the need for disinfection of effluents used for spray disposal. They cited studies which conclude that sprays could be carried significant distances and that pathogenic microorganisms could be isolated from the sprays. The property owners request that the disinfection requirement be included

in the waste discharge requirements was supported by Dr. Jay M. Beans, Lassen County Health Officer. A statement indicating that officials of the State Health Department had concluded that disinfection should be required if any risk was involved was also submitted to the Regional Board by Assemblyman Statham.

II. CONTENTION AND FINDINGS

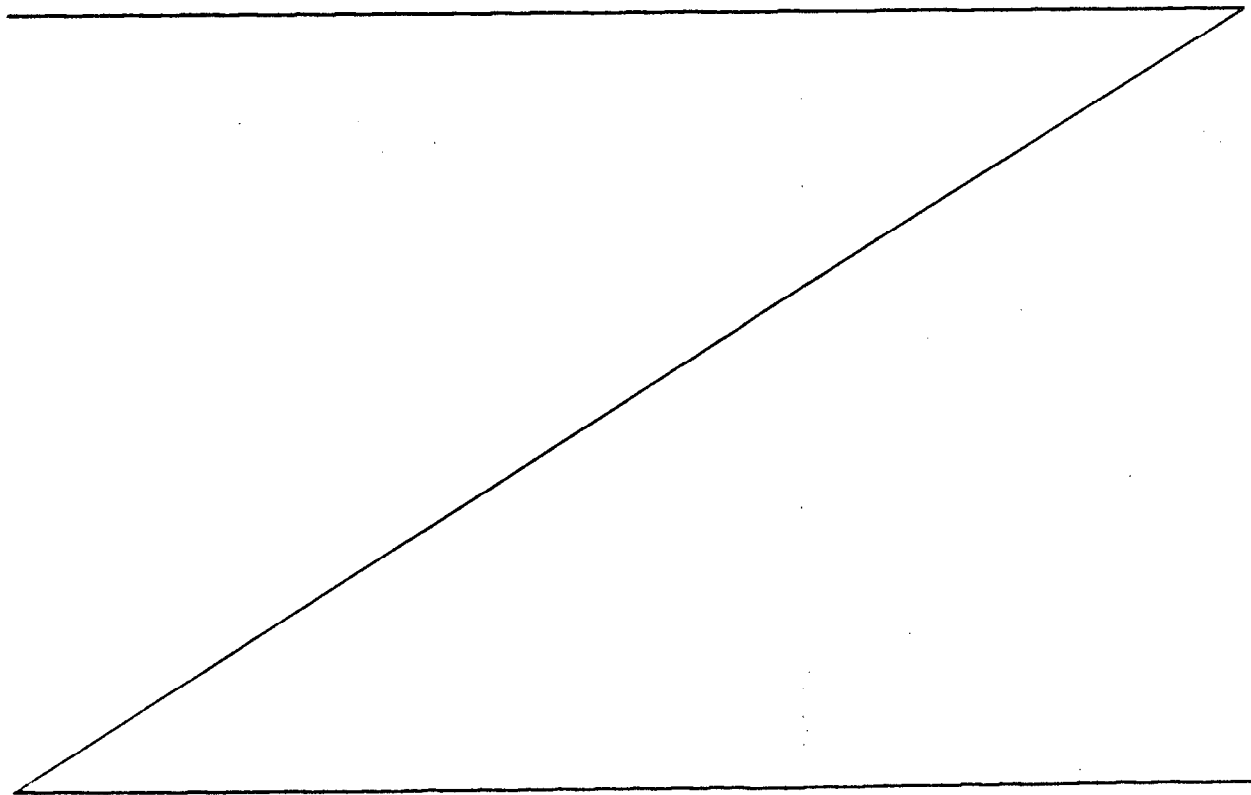
The Division of Water Quality contends that since the spray disposal site is located in a remote area and approximately 2,300 feet from the nearest residents, disinfection of the effluent before spray disposal is not necessary. Division staff members believe that mitigation measures incorporated in the project to prevent aerosol drift, including the trees, special sprinkling equipment, and buffer zone, are sufficient to protect the public health.

From our review of the record before the Regional Board, we make the following findings: (1) little conclusive technical information is available relative to the transport of pathogenic organisms by aerosol drift; (2) it is not known whether the proposed mitigation measures would be sufficient to effectively prevent human exposure to pathogenic organisms; (3) it is not possible to conclude that health risks cannot be associated with the disposal of undisinfected effluent; and (4) in this case, public health officials were split as to the need for disinfection.

III. CONCLUSION

We conclude, therefore, that the Regional Board's action to include the disinfection requirement in the waste discharge requirements for the California Correctional Center at Susanville was appropriate. Our conclusion is based on our belief that the added cost of the disinfection facilities is not sufficient to outweigh the benefit of extra protection to public health which will be provided by the facilities.


Because the disinfection requirement has been included in the waste discharge requirements, we further conclude that the mitigation measure which involves the trees along the boundary of the disposal site will no longer be necessary. This mitigation measure is hereby deleted from the findings in the Regional Board's order.



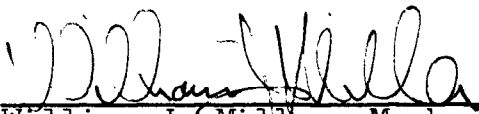
IV. ORDER

IT IS THEREFORE ORDERED that the California Regional Water Quality Control Board, Lahontan Region, did not err in including a disinfection requirement in Order No. 6-78-27, Waste Discharge Requirements for the California Correctional Center, Susanville, and that finding 9.a. of said order is hereby deleted.

Dated: FEB 15 1979



W. Don Maughan, Acting Chairman



William J. Miller, Member



L. L. Mitchell, Member



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