



STATE OF HAWAII
DEPARTMENT OF HEALTH

P. O. BOX 3378
HONOLULU, HI 96801-3378

July 8, 2009

In reply, please refer to:
File:

Ms. Alexis Strauss, Director
Water Division (WTR-1)
U.S. Environmental Protection Agency, region IX
75 Hawthorne Street
San Francisco, California 94105-3901

Dear Ms. Strauss,

Re: Request for EPA approval of Hawaii Water Quality Standards changes
Set #1, 2009, chlordane typo, enterococcus

Amendments to and compilation of Hawaii Administrative Rules Title 11, Chapter 54, Water Quality Standards were adopted by the State of Hawaii Department of Health (DOH) on June 15, 2009, following a public hearing held April 27, 2009. These amendments, approved by Governor Linda Lingle on June 05, 2009, include the correction of an inadvertent typographical error made in the adoption of section 11-54-4 on November 30, 1989 (toxic pollutant fish consumption criterion for chlordane), and two revisions to the State's specific criteria for recreational waters contained in section 11-54-8 (geometric mean and single sample maximum enterococcus content in marine recreational waters within 300 meters (one thousand feet) of the shoreline, including natural public bathing or wading areas). We request that the U.S. Environmental Protection Agency (EPA) review and approve these revised water quality standards pursuant to section 303(c) of the Clean Water Act (CWA) and its implementing regulations, 40 CFR Part 131.

The new Administrative Rules and their supporting documentation (including the Rationale for Proposed Revisions, Notice of Public Hearing, public hearing sign-in sheets, six written comments received, and Responsiveness Summary) are enclosed for EPA review. As explained in this enclosed documentation, the State has determined that the revised State criteria are sufficient to protect designated aquatic life and recreational uses by ensuring that the revised numeric criteria are based on CWA Section 304(a) guidance. The State Deputy Attorney General approved the amended rules as to form, confirming that the State has followed its legal procedures for revising standards.

In presenting the methods used and analyses conducted to support the revisions to the State's specific criteria for recreational waters, and information on general policies applicable to State standards which may affect their application and implementation, we wish to emphasize that the pertinent EPA guidance for these criteria does not provide any scientifically-defensible support for the previous 1989 DOH conclusion that there is a measurable, detectable gain in public health protection when the geometric mean enterococcus content in marine waters changes from 35 CFU/100 ml to 7 CFU/100 ml. In fact, recent EPA-funded analysis of this guidance (e.g. Versar, Inc.'s 2004 *External Peer Review of EPA Analysis of Epidemiological Data From EPA*

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Bacteriological Studies) provides several explanations of why downward extrapolation of the data in the guidance is unacceptable, if not impossible. Thus, over twenty years of new scientific knowledge about the limitations of the original epidemiological research and the indicator upon which it relies has lowered our confidence in the previous DOH risk-based decision that established the previous bacteria indicator geometric mean criterion, and has raised our confidence in the criteria adopted by other jurisdictions with significant scientific resources, such as the European Union (criteria range from 100-200 CFU/100 ml, 95th percentile value) and New Zealand (criteria for marine waters range from 40-500 CFU/100 ml, 95th percentile value depending on the proximity of probable human pathogens). Based on the multiple lines of evidence presented in support of our revision of the criterion, we conclude that the difference between 7 and 35 CFU/100 ml geometric mean enterococcus content in marine waters does not represent a measurable change in public health risk, does not constitute a significant public health concern, and does not lower water quality. Therefore, the State has determined that these amendments are consistent with the State's general policy of water quality antidegradation, and with the requirements of the CWA and EPA's regulations at 40 CFR 131.5 and 131.6.

As indicated in the enclosed Responsiveness Summary, the State has made extensive efforts to include the public in the development and review of revised water quality standards, and submits that the public participation procedures followed by the State in the development and adoption of the June 2009 amendments are consistent with 40 CFR 131.20(b). The proposed revisions and supporting analyses were made available to the public prior to a public hearing, which was held for the purpose of reviewing water quality standards, in accordance with provisions of State law, EPA's water quality management regulation [40 CFR 130.3(b)(6)], and EPA's public participation regulation (40 CFR Part 25).

Public review of the issue went beyond the formal administrative rule procedures. The Responsiveness Summary does not document the extensive public discussion of the issue of enterococcus standards in S.B. 1008 and H.B. 834 in this last Hawaii legislative session. S.B. 1008 was passed and signed into law by the Governor as Act 126 on June 16, 2009. Legislative history may be found at <http://www.capitol.hawaii.gov/site1/docs/docs.asp>, and DOH testimony may also be found at <http://hawaii.gov/health/environmental/env-planning/wqm/wqrev.html>. I know that the issue was also covered by the media. I personally answered questions from legislators on the bacteria standards during public hearings on the bills. I have never experienced so much public or legislative attention to a proposed change in DOH standards.

We look forward to your approval.

Sincerely,


Laurence K. Lau
Deputy Director for Environmental Health

Enclosure

c: Kelvin Sunada/EPO