Sanitation Branch  
Department of Health  
591 Ala Moana Boulevard, Room 102  
Honolulu, HI 96813  

Dear Mr. Brian J. Choy:  

Repeal of Chapter 11-13A and  
Adoption of Chapter 11-10  
Hawaii Administrative Rules  
Honolulu, Oahu  

The Sanitation Branch of the Department of Health is proposing to repeal Section §11-13A of the Hawaii Administrative Rules (HAR) and adopt new rules, Title 11 Chapter 10 entitled “Public Swimming Pools”. The purpose of these new rules is to set the minimum public health requirements of public swimming pools. These requirements will not apply to private pools, ornamental pools, enclosed swimming areas with a natural beach (beach venues), or marine mammal with human interaction venues (marine habitat venues). The proposed new Section, §11-10, was created as a result of a legal ruling on January 21, 1999 that the Waikiki Natatorium was subject to DOH regulation and that it was in fact a public swimming pool. The former Section, §11-13A, only addresses freshwater swimming pools. The new Section, §11-10, is an effort by the DOH Sanitation Branch to create one set of rules for all public swimming pools to ensure equitable treatment.  

This review was conducted with the assistance Roger Fujioka, Water Resources Research Center; Bruce Kennard Swimming Pool Coordinator UH Manoa; and Renee Thompson, Environmental Center.  

General Comments  

As presently drafted, the proposed new swimming pool rules fail to address the most serious and significant potential health hazard of non-disinfected, “open system” salt water swimming pools, namely the presence of Staphylococcus aureus. The new rules fail to provide any standard for S. aureus in the water. Given the extent of public concern and the amount of deliberation which has been made to address this concern, the DOH should provide a separate guidance document summarizing the existing information, recommendations, and data for S. aureus, as well as other problems that were identified for open system, salt water swimming pools. This guidance document can serve several needs. First, there is a need to summarize this kind of data to aid future administrative decisions, such as the granting of operational permits.
that will need to address the safety and health problems identified for open system, salt water pools. Second, the availability of this guidance document will overcome the obvious shortcomings of the proposed swimming pool regulations, which ignore the concerns and discussions on *S. aureus* infections. This will address the predictable concerns of the public. Third, this document can serve as the basis by which DOH will plan to address or resolve these problems in the future.

**Chlorine Content**

In public freshwater swimming pools §11-10-15 (b-2) page 10-10, a residual chlorine of 0.6 ppm is required but in closed saltwater swimming pool §11-10-16 (3) page 10-11 no guidance is given to dose or residual chlorine for the required disinfection. The rules should be modified to address this deficiency.

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**Public Saltwater Swimming Pools §11-10-16**

The saltwater swimming pool monitoring plan guidelines Section §11-10-16 (c-2) page 10-13, states that, “Water clarity shall be monitored at least daily at times of peak use”. It is unclear whether water clarity measurements refer to secchi disk measurements only. Secchi disks provide a very crude estimate of the clarity (turbidity) of the water and are essentially a yes and no result. They do not provide a quantifiable measurement of clarity that a turbidity measurement can provide. Since water clarity is an expected problem in salt water swimming pools, particularly in an open system receiving input from near shore waters, more frequent sampling (3-5 times a day related to tide) and using a quantitative method such as a turbidity meter should be used. This kind of equipment will provide useful data which can be compared over time and various conditions of tides, winds, waves, number of swimmers, time of year etc).

Section (c-3) proposes weekly sampling for enterococci in the water column. The number of sites in the pool was not stated. Section (c-4) indicates that fecal indicator bacteria shall be monitored at multiple stations. Does “fecal indicator bacteria” refer only to enterococci? How often will these stations be monitored? Why is there no requirement for monitoring freshwater swimming pools for fecal indicators? The microbial water quality standard for fresh water swimming pools is not stated and should be included in this regulation. If chlorine residual is to be used in lieu of microbial monitoring, this should be stated. Nevertheless, the water quality standard should be identified and some frequency of monitoring of the water from freshwater pools should be completed to obtain a reliable data base that the chlorine residual is effective is meeting the microbial water quality standards.

The final note of Section §11-10-16 (c-9) states that “The public shall be informed by placard that “a public salt water swimming pool is not disinfected”. This information is insufficient. It assumes that swimmers know the risks. Additional information such as the expected risk and what kind of risk to expect should be added. Furthermore, this section should be amended to state “an open system, public salt water swimming pool is not disinfected”.

**Public Swimming Pool Cleaning §11-10-18**
Page 10-13 mentions the need to remove visible scum, dirt, or floating matter from public swimming pools within twenty-four hours by flushing or other affective means. This section should be expanded to include bottom debris.

Page 10-14 section (c) states that “All public swimming pool surfaces must be kept free of growth to prevent skin abrasion of swimmers”. Skin abrasion is a bad effect of growth on the pool surfaces but is not the only bad effect. Growth on walls may not cause skin abrasions but can result in other detrimental effects such as growth of pathogens, interference with disinfection, addition to turbidity, source of nutrients, and production of toxins.

Sincerely,

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cc: OEQC
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