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PROPOSED COMMUNITY NOISE CONTROL REGULATIONS FOR OAHU (CHAPTER 44B) FIFTH DRAFT

Statement for the Department of Health
Public Hearing, August 22, 1975

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This statement is presented on behalf of the Environmental Center with the approval of the Center Director. It does not, however, represent an institutional position of the University of Hawaii or the Department of Mechanical Engineering.

Taken in its entirety, the fifth draft of "Community Noise Control for Oahu" is a significant improvement relative to the fourth draft. Among the important features added are:

- (a) A mechanism to allow for statistical variation of community noise levels normally acceptable to most residents.
- (b) A more stringent table of "allowable noise levels."
- (c) Definition of methods and criteria for granting permits for activities in the public interest that create excessive noise. This is a fundamental change, since no activity is now prohibited. Those that create excessive noise may continue, but only with the knowledge and approval of the Director, and subject to controls imposed by the Director.
- (d) Specific recognition of the value of Hawaii Revised Statutes 46-17 and 711-1101 in controlling and abating noise.
- (e) Specific recognition that construction and agricultural activities are important to the welfare of the state, while attempting to provide reasonable relief for the neighbors of these activities from the high noise levels they sometimes create.

The intent of the Department to prevent, control, and abate excessive noise is clear. The draft, however, requires changes in organization and language to articulate this intent more clearly.

The following comments and suggestions are coordinated with the draft organization, rather than in the order of their importance. Since some sections and their comments are interrelated, discussion of a particular point may appear in more than one place.

Preamble:

- P* 1, L.2; replace [not detrimental] by conductive. Purpose: to state positive rather than negative goals.
- P 2, L.1; delete [unnecessary and]. See comment re def. jj.
- P 2, L.6; replace [community] by excessive;
replace [practicable] by practical.

Section 2: General Definitions

- b. Change to read, "Activity - any act or combination of acts under the control of a person which [actually results in the] creates excessive noise Such acts include but are not limited to excavation, demolition etc." Purpose: emphasize that regulation does not apply to acts of nature; replace words inadvertently omitted.
 - c. Change to read "Allowable Noise Levels - the sound levels identified in Section 3."
 - j. replace [10:00 p.m.] by 6:00 p.m. See comment below re Evening.
 - p. replace [possible] by probable imminent. Purpose: to restrict application without permit.
- between p. and q. Add "Evening - the time period between 6:00 p.m. and 10:00 p.m. of the same day." Purpose: to recognize that most people observe a semi-quiet period between work and sleep. Construction and agricultural field operations are not affected by this addition.
- q. Change to read, "Excessive Noise - any sound or sequence of sounds [exceeding] to which an individual is exposed and which exceeds the allowable noise [levels] level more than 10% of the time in any 20-minute period. For the purpose of this definition, any sound having a duration less than 1 second shall be assumed to last 1 second." Purpose: control is concerned with exposure of individuals, not just

*"P" means paragraph in the section or subsection identified; "L" means line in that paragraph; added material is underscored; deleted material is [bracketed].

the creation of noise. By including the active definition here, and omitting draft Sec. 3a, the regulation becomes more clear. For enforcement purposes, the definition must allow a simple way to account for duration of impulse and other short duration sounds.

- r. Impulsive or Impact Noise. L.2; replace [1/2] second by 1 second, delete [, excluding reflections,]. Purpose: the definition should allow for simple measurement with a stop watch or a watch with a sweep-second hand. In 1/2 second, a sound travels over 500 ft; in 1 second, over 1000 ft. Most impact sounds are created within 100 ft. of some reflective surface. The draft definition would not allow regulation of impact sounds, since such a sound and its immediate reflection cannot be distinguished by a sound level meter.
- s. Change to read "Muffler - mechanical[ly designed] apparatus [for the purpose of receiving exhaust gas from an internal combustion engine or compressed air device for the purpose of effectively reducing noise.] designed to allow flow of gas or steam and to reduce the noise created by intake from or exhaust to the atmosphere by such flow. Spark arrestors etc." Purpose: the draft definition does not include steam and does not include intake mufflers. The term "gas" includes air. See suggested revised Sec. 5a(1)a.
- ee. L.2. change to add ". . . such as those from microphones, phonograph players, or tape decks."
- ff. L.4. change to add ". . . IEC 123 or their most recent . . ."
- ii. L.1. delete [which is designed to be]. Purpose: concern is with actual use, not a designer's intentions.
- jj. Unnecessary Noise. Omit the entire definition and any reference to it in the regulation. The purpose of the permit system is to allow the Director to determine what excessive noise is unnecessary and what should be allowed in the public interest. The term is a holdover from previous drafts which did not articulate the permit system. It is confusing to interpretation of the present draft.

Section 3.

Change title to read, "ALLOWABLE NOISE LEVEL[S] LIMITS IN DBA [AT THE PROPERTY LINE]." Purpose: clarity of the regulation is enhanced by listing the sound levels separately from statements that qualify their application.

TABLE 1.

The allowable noise levels stated in the table appear to be reasonable, when taken with the definition of excessive noise as suggested in these comments, for all zoning districts except Agricultural and Industrial.

The Agricultural zoning district presents special problems in that activities allowed by the CZC range from those that require quiet surroundings (e.g., single-family residences, hospitals, sanitariums, churches, and schools) as well as those which create high noise levels in their normal operation (e.g., airports and quarries). For those activities requiring quiet, a 65 dBA limit, day and night, is far too high. On the other hand, for agricultural field activities, a higher allowable noise limit can be set.

A possible way to deal fairly with this problem may be to specify a 70 dBA limit for daytime and nighttime in Agricultural districts and to add a new subsection such as that given below. In the column heading, "Daytime" should be replaced by "Daytime and Evening." Limits for daytime and nighttime in districts zoned Industrial I-1 are reasonably set at 65 dBA, but for districts zoned I-2 and I-3, the limits can reasonably be increased to 70 dBA.

Section 3a.

Delete entire section. The regulation becomes more clear if the qualification on the application of Table 1 is stated in the definition of excessive noise. See suggested revision of Sec. 2q.

Insert a new Section 3a, "The limits specified in Table 1 for Residential and Preservation districts shall apply, subject to the order of precedence stated below, to lots in Agricultural districts that are used for activities where sleep, rest, and voice communication are necessary to the successful implementation of such use. These activities include, but are not limited to, residences, hospitals, sanitariums, churches, and schools. The applicability of the lower noise limits shall be based on the order of precedence in which uses were initiated provided, however, that a new order of precedence is established when any use is discontinued. For example, if agricultural field operations are conducted next to a lot used as a residence, the Agricultural limits would apply if the building permit for the residence was obtained after agricultural field operations had been initiated. Residential limits would apply if the building permit for the residence was obtained before agricultural field operations had been initiated. Purpose: to protect both agricultural operations and home-owners from use changes over which they have no control."

Section 4. Exemptions

- f. Replace [To airports and aircrafts] by To activities at airports operated by State or Federal agencies where such activities are governed by FAA regulations or are under Federal military control; provided, however, that this exemption is limited to airports for which construction was initiated prior to January 1, 1976.
Purpose: the draft exemption is too broad. Industrial activities on an airport, such as engine repair, overhaul, and testing, should be governed by the 70 dBA limit suggested for the corresponding zoning district. Helicopter operation, installation of heliports,

and construction of new airports should be governed by the order of precedence rule suggested in these comments for Sec. 3a.

Sec. 5.

L.1. and L.2.; replace [Subsections a and b below] by this regulation.
L.5.; change to read "such persons, [any] excessive [or unnecessary] noise [, which travels] at or beyond etc."

Sec. 5a(1)a.

L.3.; change to read "requiring an intake or exhaust of gas or [air] steam to or from the ambient air without [a] mufflers; provided, however, that no mufflers are required if the vehicle, equipment, or device is operated without creating excessive noise." Purpose: to avoid requiring mufflers where they are not necessary for noise control.

Sec. 5a(1).

Add the following new section:

d. No person shall operate, except on private property with the express permission of the owner thereof, a vehicle legally operable on traffic-ways, unless such vehicle is equipped with mufflers which will allow it to meet the provisions of Chapter 44A, Public Health Regulations.
Purpose: to bring trail bikes and scramblers under some control. It does not affect agricultural or construction activities.

Sec. 5a(2).

Change to read, "Highway Noise: No highway or freeway which [would produce] can be expected to create at designed capacity operation a noise level of 50 dBA or more inside any school classroom, library, [or] multi-purpose room, hospital, [or] rest home, or dwelling already in existence and used for [this] its primary design purpose shall be constructed without first providing [adequate sound-proofing of the affected facility] for noise control measures which can be expected to limit the noise level inside the facility to no more than 50 dBA." Purpose: private citizens should not be required to pay for noise control features required to quiet their homes where the noise results from sources over which they have no control and which become operative after they have occupied their homes. Any noise control measure should be available to the government, not just sound proofing of the facility.

Sec. 5b.

Replace 5B(1) and 5b(2) in their entirety by the following:

(1) Construction, Agricultural field, and Industrial Activities

- a. No construction or industrial activity shall create excessive noise during the evening and nighttime periods or on Sunday or on any State or National holiday.
- b. No agricultural field operation shall create excessive noise during the time period from sunset to sunrise the following day or on Sunday or on any State or National holiday.
- c. During the time periods not restricted by (a) or (b) above, noise from construction, agricultural field, or industrial operations shall not exceed 70 dBA more than one cumulative hour in any day or 90 dBA more than 10% of any 20-minute period.
- d. For the purposes of this regulation, the point of measurement shall be at or inside the property line of any occupied premise near the site of activities. The regulation shall apply only when the premise is actually occupied by one or more individuals. The regulation shall not apply to premises totally enclosed by the property line of the activities site.
- e. For construction activities, zoning districts for nearby affected premises shall be taken over the life of the construction project, but not to exceed three years, as those in existence 6 months prior to the approval of a building permit or other final governmental approval to proceed, as appropriate.
- f. For agricultural field activities, zoning districts for nearby affected premises shall be taken over the life of the activities as those in existence 12 months prior to the time agricultural operations were first initiated on any area currently under cultivation; provided, however, that the area has been continuously cultivated with the same kind of crop, and that any change in operations does not result in an increased noise level at any affected premise.
- d. For industrial activities, zoning districts for nearby affected premises shall be taken over the life of the activities as those in effect 6 months prior to the start of construction of original, additional, or replacement plant facilities. If the plant has been in continuous operation, changes in nearby zoning districts shall affect only the additional or replacement facilities. If any change in the plant or its operation, including but not limited to change of equipment, modifications to the plant, or change of

scheduling, results in increased noise levels on any premise, the zoning districts in effect 6 months prior to the effective date of the change shall govern.

Purpose: the goals in rewriting 5(b)1 and 5(b)2 are:

1. to make use of revised definitions to simplify wording.
2. to shorten and tighten some wording.
3. to place specific limits on operations at all times. No operation is prohibited, since permits may be granted if operations require that these limits be exceeded. The limits are the upper values of those that an average homeowner might be expected to tolerate. They are not optimum. Complaints can be expected. Some flexibility in scheduling agricultural field and construction operations may be required.
4. to limit applicability of the regulation to inhabited lots and to lots not directly under control of the owner of the agricultural, construction, or industrial operations.
5. to provide protection of construction, agricultural field, and industrial activities against changes in zoning district that occur after initiation of operations (in effect, a "grandfather" clause).

Sec. 5b(3).

Replace by the following: Home and Yard Maintenance

- (a) No person engaged in home and yard maintenance activities in any residential, apartment, or hotel district shall create excessive noise between 5:00 p.m. of any day and 9:00 a.m. of the following day or on Sunday or on any State or National holiday.
- (b) During the time periods not restricted by (a) above, noise from home and yard maintenance shall not exceed 70 dBA more than one hour during any day or 90 dBA at any time.

Purpose: to place noise limits on activities at all times and to use revised definition of excessive noise.

Sec. 6. Permits

- a. L.3. and 4: change to read, "devices which [emit noise levels in excess of the limits specified in Section 3, Table 1 of these regulations] create excessive noise or exceed limits specified in Section 5. etc."
Purpose: to use revised definition of excessive noise and to include Sec. 5.

Sec. 6b(4).

Change to read "The Director may issue permits extending into the nighttime [period (10:00 p.m. to 7:00 a.m.) shall be issued for conditions where] on condition that the applicant [obtained a consent] obtain the consent in writing from at least 80% of the people residing within 1000 feet [radius from] of the perimeter of the location etc." Purpose: to allow Director discretion. Comment: This section needs a more explicit definition of "people," and procedures are required to determine the total number of people in an affected area.

Sec. 6. Insert a new section

- e. If the Director does not act on an application for a permit within 30 days after its receipt by the Department, the permit shall be deemed to have been granted. Purpose: to protect an applicant for a permit against a "pocket veto" and against Departmental delay for any reason. Comment: this section is identical to Sec. 4(i) of Chapter 44A.

Sec. 9b.

L.3: Change to add, "a reasonable schedule" Purpose: to protect both Department and violator.

Sec. 10b(2)a.

L.1: Change to read, "The following types of noise on any premise, including but not limited to public areas such as beaches and parks [should] shall be primarily controlled and." Purpose: to emphasize that this section is the only one in the regulations that applies to public areas. Comment: the preamble states the Department's intent to protect people on the public beaches and parks. It is necessary in these areas to protect people on the premises from noise created by other persons on the same premises as well as by persons on nearby premises.

Sec. 10. Add a new section

- e. No part of this regulation shall be allowed as a defense against suit brought by any person for damages alleged to occur as a result of noise. Comment: the fact that a person is allowed to make noise does not mean that he is required to do so. This section may reduce the Department's involvement in litigation.

Sec. ____

Add a new section, "Publication" (to be identical to Section 14, Chapter 44A, Hawaii Revised Statutes). Comment: the public has a right to easy access to the history of the Department's actions.

There is an omission, possibly important, from the draft and these comments. Part 342-42, Hawaii Revised Statutes, requires that animal life be protected from excessive noise. Zoo's, chicken farms, and animal breeding can be adversely affected by excessive noise. It may be appropriate to provide such protection in this regulation.

In conclusion, the fifth draft represents a substantial improvement over previous drafts. It is not perfect, and is not likely to be so even if the Department adopts the foregoing suggestions. The author would be delighted to discuss the suggestions with Department personnel.