



University of Hawai'i at Mānoa

Environmental Center

A Unit of Water Resources Research Center
Crawford 317 • 2550 Campus Road • Honolulu, Hawai'i 96822
Telephone: (808) 956-7361 • Facsimile: (808) 956-3980

RL:1321

HB 2887

RELATING TO ENVIRONMENTAL PROTECTION

House Committee on
Energy and Environmental Protection

Public Hearing - February 3, 1996
9:00 A.M., Room 312, State Capitol

By

John T. Harrison, Environmental Center
John Burgess, Emeritus, Mechanical Engineering

HB 2887 would amend Chapter 342F, HRS, to establish definitions for "accumulative noise", "fixed noise source", and "impact noise", and to incorporate those definitions into noise permitting sections. It would further require specific provisions for abatement of construction noise in urban areas.

Our statement on this measure is compiled from voluntarily submitted opinions of listed academic sources, and as such, does not constitute an institutional position of the University of Hawaii.

The term "accumulative noise" is not defined in any acoustical reference that we are aware of. Standards committees often spend years coming to an acceptable and enforceable definition of an acoustical term. There is a term "noise exposure". You will find this described in

Handbook of Acoustical Measurements and Noise Control, 3rd Edition,
edited by Cyril M. Harris, McGraw-Hill, 1991

With reference to pile drivers, there are two major sources of noise: (1) the diesel power source, and (2) the impact of hammer on pile. Commercial mufflers are readily available to muffle diesel exhaust noise, but noise from the engine block requires an enclosure. The impact noise is difficult to reduce. It can, in theory, be done by enclosing the pile and hammer in a tube, but this seems difficult to do in practice at reasonable cost. Finally, there is the "curfew" route: pile driving shall not be allowed before xxx nor after xxx and not at all on sundays and holidays. All of these are likely to be resisted on the basis of costs, both immediate and resulting from construction delay.

Again, the existence of local ordinances regulating noise as a public nuisance is noted, specifically as authorized by §46-17, HRS.