HB 512
LIVESTOCK STAGING AREA OF HOLDING PENS
AT NAWILIWILI HARBOR

Statement for
House Committees on
Agriculture
Transportation
Joint Public Hearing - February 18, 1987

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HB 512 would appropriate funds for the design and construction of a livestock staging area of holding pens at Nawiliwili Harbor. The statement on this bill does not represent an institutional position of the University of Hawaii.

The bill does not indicate the location or dimension of the staging area or holding pens that would be constructed nor the type or number of animals or the duration of their stay in the holding pens. Assuming that the pens would house livestock such as cattle or swine prior to shipment and that significant quantities of manure would therefore be generated, we suggest that due caution be exercised in the location of the pens so as to avoid waste runoff to Nawiliwili Harbor.

A study of livestock feedlots in Texas 1979 revealed that approximately 10 percent of the lots tested were positive for salmonella bacteria. If the holding areas remain wet, due either to poor drainage or surface runoff, coliform and salmonella bacteria can be expected to survive for many days and may enter the harbor if runoff from local rains occurs. Research carried out in 1978, also in Texas, suggested that the survival of salmonella in soils, and particularly under wet conditions, could reach 42 days and concluded that salmonella in soil is a potential public health problem that needs to be better evaluated. At least one strain of salmonella, Salmonella weltevreden is known to be particularly resistant and survives for some time in sea water. We do not know if it has been
recovered in cattle or swine manures but it has been recovered from several sources in Hawaii including fresh waters, rats, fish (Tilapia), birds (egrets), and geckos which suggests that it is fairly ubiquitous in Hawaii. It may well be present in feed lot manures as a secondary contaminant from the sources listed above if not directly from the livestock manure.

One final point is of interest. Livestock animals held in confined holding areas are frequently fed antibiotics to control disease. This practice has resulted in the development of antibiotic resistant strains of salmonella. The ramifications of this to public health are uncertain at this time but an issue of concern suggesting that caution be exercised in the location of livestock holding pens.

Although direct links between livestock manures containing salmonella and the incidence of human disease may not have been shown, the contamination of water by livestock manure is considered a health hazard to humans and is prohibited by both federal and state statutes. Prudence suggests that the Department of Health be consulted about the location of the holding pens to assure that significant non-point source pollutants do not flow or leach into Nawiliwili Harbor.