



STATE OF HAWAII
DEPARTMENT OF LABOR AND INDUSTRIAL RELATIONS
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February 5, 2009

To: The Honorable Karl Rhoads, Chair
and Members of the Senate Committee on Labor

Date: February 5, 2009
Time: 2:45 p.m.
Place: Conference Room 309, State Capitol

From: Darwin L.D. Ching, Director
Department of Labor and Industrial Relations

H.B. 1130 - Relating to the Boiler and Elevator Safety Law

I. OVERVIEW OF PROPOSED LEGISLATION

H.B. 1130 proposes to allow the Department of Labor and Industrial Relations to establish re-inspection frequencies for elevators and kindred equipment based on factors that may affect the safe operation of the equipment. Newer equipment with fail-safe technology that is regularly maintained will be allowed a longer interval between re-inspections. Older equipment that is inadequately maintained will be subjected to more frequent re-inspections.

There are two other housekeeping amendments:

- 1) §397-4(b)(7) clarifies that in addition to questioning people about accidents or unsafe conditions, that state inspectors may also obtain pertinent records and documents; and
- 2) §§397-4(d)(3) and (4) have been combined to make clear that the state elevator inspectors can only red-tag (prohibit) the use of equipment if the unsafe condition constitutes an imminent hazard.

II. CURRENT LAW

Currently the law requires that re-inspections for renewals of permits to operate not exceed one year.

III. HOUSE BILL

The Department strongly supports this bill for the following reasons:

1. House Bill 1130 allows the department to become more efficient without compromising safety by setting inspection frequencies for elevators based on factors related to safe operation rather than a set period of time. This measure is part of a package of initiatives designed to increase the department's efficiency with regard to inspections of regulated equipment. Like everyone else in the state, the department is seeking ways to accomplish its mission in a cost-effective manner.
2. Elevators today have a number of redundant safety features; features that some older elevators do not have. There is no need to inspect newer elevators as frequently as older elevators. National consensus standards (American Society of Mechanical Engineers (ASME) set recommended inspection frequencies over 30 years ago, which have not changed despite the newer technologies. In addition, the 2004 elevator safety code (ASME A17.1) recognized that building owners and managers can do more to prevent the kinds of accidents by inspecting the elevator cars for debris and tripping hazards, damaged emergency lights, and calling in a repair person to address car leveling issues.
3. Of eighty six (86) elevator accidents reported to the department from 2000 through 2008, all but one could have been prevented by the building owner or manager, through regular inspections and repairs, or were caused by inattention or horseplay by the passengers. The one mechanical issue was unexpected and would not have been detected by a state or any other inspector. The most common type of accident was tripping (50%), with caught in elevator doors second at 23%. Nearly all were due to inattention and/or misuse. The state elevator inspector cannot prevent such accidents.
4. Looking at inspection discrepancy data for new elevators installed in 2004 shows that discrepancies are negligible for 2 years following the initial acceptance test and start to creep up by year 3. (See attachment B) However, nearly all of these discrepancies are for conditions that were the responsibility of the building owner or manager - such as inoperable emergency lights, communications, debris, or lack of a fire extinguisher. Even a yearly inspection is not enough to prevent such conditions. The current national safety code requires monthly inspections by building owners and managers of common elements.
5. Setting inspection frequencies dependent on equipment age, type, and maintenance (maintenance contract and discrepancy history) will invite responsible building owners and managers to actively participate in the safe operation of their elevator.
6. Allowing the department to inspect new equipment that is adequately maintained at 2 or even 3 year intervals frees up the department's resources to be able to inspect old and/or

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poorly maintained equipment even more often – perhaps at six-month intervals. Currently, the law allows us only a one-size-fits-all approach.

7. The State of Oregon has a one, two, and three year inspection interval based on the type of equipment only. They did not use age and maintenance because their data base was unable to capture such information. They too concluded that it was not necessary to inspect all equipment every year. Attached is their Table describing the inspection frequency of various types of elevators and kindred equipment.

Currently inspectors can red-tag equipment for ordinary violations, yet must seek a court order if the danger is imminent. This is clearly backwards.

Please allow the department to carry out its mission of assuring the safe operation and use of elevators and kindred equipment efficiently and without compromising safety. We urge your support and passage of this measure and stand ready to answer your questions.

Attachments:

Table A - Elevator Accidents, 2000 – 2008

Table B – Discrepancy History for Elevators installed in 2004

Table 1-A, Oregon Administrative Rules on Inspection frequency

Attachment B

Discrepancy History for Elevators Installed in 2004

N = 78

Year	2005 (Yr 1)	2006 (Yr 2)	2007 (Yr 3)	2008 (Yr 4)
Avg Discrepancies* per inspection	0.13	0.13	0.45	1.00

Extrapolated data – i.e. if year 1 and year 3 had no discrepancies, then year 2 is presumed to also have “0” discrepancies.

Attachment A

Elevator Accidents
2000 - 2008

	Type of Accident						Mechanical/Disc					TOTAL
	Level	Drop	Vibr/Stop	Door	Trip	Other	Mech -	Disc-Ow	Other	No	Unk	
2000	3	1	1	1			1	1	2	2		6
2001	4	2				1		6			1	7
2002	4	1	3	3	1			1	1	9	1	12
2003	4			3	1	3			2	4	5	11
2004	1	2	1	3	2	2		2	1	2	8	13
2005	5			2	3	1		3	1	4	3	11
2006	4			4				1		5	2	8
2007	4	3	1	3	1	1		4		6	3	13
2008	4			1						3	2	5
	33	9	6	20	9	7	1	18	7	35	25	86
	38.4%	10.5%	7.0%	23.3%	10.5%	8.1%	1.2%	20.9%	8.1%	40.7%	29.1%	

Code

Type of Accident

- Level Car not level
- Drop Car allegedly dropped from one level to another
- Vibr/Stop Car allegedly either shook/vibrated, or suddenly stopped
- Door Door closed on body part of passenger
- Trip Passenger tripped while either entering or exiting elevator car
- Other All othertypes of accidents

Cause of Accident

- Mech Mechanical problem - NOT preventable by owner/manager
- Disc/Ow Issue could have been prevented by owner/manager
- Other Related to entryway to elevator, i.e. frayed carpet
- No Not related to mechanical problem or discrepancy
- Unknowr Cause unknown

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Table 1-A

1-year inspection interval	2-year inspection interval	3-year inspection interval
Escalator Inclined Elevator Belt Manlift Moving Walk	Rack & Pinion Sidewalk Elevator Sidewalk Material Lift Special Purpose Personnel Elevator Freight-Hydraulic Freight-Electric Passenger-Hydraulic Passenger-Electric	Stairway Chairlift Dumbwaiter Limited-Use Limited Application Material Lift Vertical Reciprocating Lift Vertical Wheelchair Lift Inclined Wheelchair Lift Stage Lift

yamashita1- Kathy

From: mailinglist@capitol.hawaii.gov
Sent: Thursday, February 05, 2009 8:56 AM
To: LABtestimony
Cc: landon.deville@thyssenkrupp.com
Subject: Testimony for HB1130 on 2/6/2009 8:30:00 AM

Testimony for LAB 2/6/2009 8:30:00 AM HB1130

Conference room: 309
Testifier position: comments only
Testifier will be present: Yes
Submitted by: Landon I. deVille
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Submitted on: 2/5/2009

Comments:

This bill states in Section 1 that "Equipment that is older and inadequately maintained will be subjected to more frequent re-inspections and the owner will have to pay for the additional inspections". For clarification purposes I have the following questions:

1. Is the intent for the State Elevator Inspector to determine how well the equipment is being maintained by the Elevator Maintenance Company? If not this should be clarified.
2. If the answer to #1 is yes then: What definition or guidelines will be used to determine the level of maintenance being done on an elevator? What definition will be used for inadequately maintained?
3. Finally is it the intent that the State Elevator Inspector be responsible for evaluating maintenance and penalizing owners that do not have adequate maintenance via more re-inspections at the owner's expense?

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