

DAVID Y. IGE
GOVERNOR

JOSH GREEN
LIEUTENANT GOVERNOR



SCOTT T. MURAKAMI
DIRECTOR

LEONARD HOSHIJO
DEPUTY DIRECTOR

STATE OF HAWAII
DEPARTMENT OF LABOR AND INDUSTRIAL RELATIONS
830 PUNCHBOWL STREET, ROOM 321
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April 9, 2019

The Honorable Tom Brower, Chair
Committee on Housing
House of Representatives
State Capitol, Room 438
Honolulu, Hawaii 96813

Dear Chair Brower:

Subject: Senate Concurrent Resolution 3 (SCR 3), Senate Draft 1 (SD 1) Convening a Task Force to Study the Issue of Residential Sprinkler Costs in New One- and Two-Family Dwellings

I am Manuel P. Neves, Chair of the Hawaii State Fire Council (SFC) and Fire Chief of the Honolulu Fire Department (HFD). The SFC and the HFD support SCR 3, SD 1, which proposes to convene a task force of various stakeholders to study the cost of installing automatic fire sprinkler systems in new one- and two-family dwellings.

The recent fire at the Marco Polo condominium on July 14, 2017, highlights the dangers of fire in unsprinklered residential buildings. According to the National Fire Protection Association's latest U.S. data, 92% of all civilian structure fire deaths resulted from home structure fires. Fatal residential fires occur in homes despite the presence of modern construction techniques and features, such as smoke alarms, fire-rated drywall, and Ground Fault Circuit Interrupter electrical outlets. Instead, they usually involve the actions and errors of the occupants in combination with the flaws and vulnerabilities of products brought into the home. Research conducted by the National Institute of Standards and Technology has shown that home fires become deadly in as few as three minutes. New and old homes alike are filled with these newer contents and furnishings, which provide less margin for success for smoke alarms and add to the need for fire sprinklers. Modern lightweight home construction products, especially wood truss roof systems and wood joists, can rapidly fail under fire conditions, an extreme risk to fire fighters responding to a fire. Automatic fire sprinkler systems have

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The Honorable Tom Brower, Chair
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proven to be a solution to saving lives and property from fire. Death rates and property loss are substantially reduced when these systems are installed and properly maintained.

The following is a comparison of fires in the City and County of Honolulu (City) from 2006 to 2015:

Fire Statistics in the City from 2006 to 2015		
	Nonsprinklered Structures	Sprinklered Structures
Fatalities	23	1
Injuries	135	9
Dollar Loss	\$154,978,453	\$6,161,469

Public testimonies during the 29th Legislative Session had a wide disparity in the projected cost of automatic fire sprinkler installations in one- and two-family dwellings, which ranged from \$7,000 to over \$70,000. The purpose of this resolution is to determine accurate installation costs of automatic fire sprinklers in one- and two-family dwellings, so our community may have the correct information on installing residential fire sprinklers.

Life safety is a priority for the SFC and the HFD and we urge your committee's support on the passage of SCR 3, SD 1.

Should you have questions, please contact SFC Administrative Specialist Lloyd Rogers at 723-7176 or lrogers@honolulu.gov.

Sincerely,



MANUEL P. NEVES
Chair

MPN/LR:clc



KAUA'I FIRE DEPARTMENT
THE COUNTY OF KAUA'I
DEREK S. K. KAWAKAMI, MAYOR
MICHAEL A. DAHLIG, MANAGING DIRECTOR

KILIPAKI VAUGHAN
DEPUTY FIRE CHIEF

The Honorable Tom Brower, Chair
The Honorable Scot Z. Matayoshi, Vice Chair

April 11, 2019; 10:30 am
Conference Room 423

In consideration of
Senate Concurrent Resolution (SCR) 3 Senate Draft (SD) 1
Relating to Residential Sprinkler Costs
In New One- and Two- Family Dwellings

Aloha Chair Brower, Vice Chair Matayoshi and Members of the Committee:

I am Kilipaki Vaughan, Deputy Fire Chief of the Kauai Fire Department (KFD). The KFD is in **support** of SCR 3 SD 1, which proposes to convene a task force of various stakeholders to study the cost of installing automatic fire sprinkler systems in new one- and two-family dwellings.

As of the start of 2019, there were 6 structure fires on Kauai, none of these structures were protected by fire sprinklers. This measure will move the industry and community to greater fire protection opportunities.

On Oahu, the recent fire at the Marco Polo condominium on July 14, 2017, highlights the dangers of fire in unsprinklered residential buildings. According to the National Fire Protection Association's latest U.S. data, 92% of all civilian structure fire deaths resulted from home structure fires. Fatal residential fires occur in homes despite the presence of modern construction techniques and features, such as smoke alarms, fire-rated drywall, and Ground Fault Circuit Interrupter electrical outlets. Instead, they usually involve the actions and errors of the occupants in combination with the flaws and vulnerabilities of products brought into the home. Research conducted by the National Institute of Standards and Technology has shown that home fires become deadly in as few as three minutes. New and old homes alike are filled with these newer contents and furnishings, which provide less margin for success for smoke alarms and add to the need for fire sprinklers. Modern lightweight home construction products, especially wood truss roof systems and wood joists, can rapidly fail under fire conditions, an extreme risk to fire fighters responding to a fire. Automatic fire sprinkler systems have proven to be a solution to saving lives and property from fire. Death rates and property loss are substantially reduced when these systems are installed and properly maintained.

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KAUA'I FIRE DEPARTMENT
THE COUNTY OF KAUA'I
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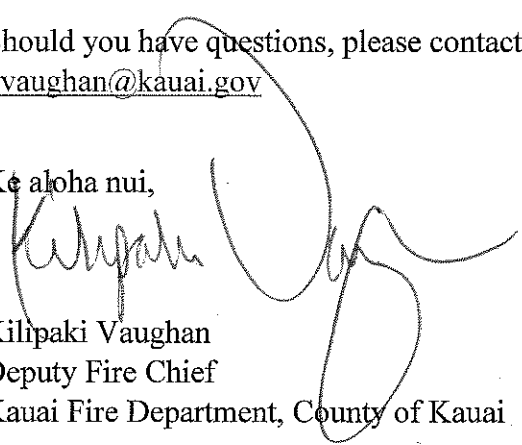
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Life safety is a priority for the KFD and we urge your committee's support on the passage of SCR 3 SD 1.

Should you have questions, please contact me at (808) 241-4980 or via email at kvaughan@kauai.gov

Ke aloha nui,


 Kilipaki Vaughan
 Deputy Fire Chief
 Kauai Fire Department, County of Kauai



MICHAEL P. VICTORINO
Mayor

DAVID C. THYNE
Fire Chief

BRADFORD K. VENTURA
Deputy Fire Chief



DEPARTMENT OF FIRE & PUBLIC SAFETY

COUNTY OF MAUI
200 DAIRY ROAD
KAHULUI, HI 96732

April 9, 2019

The Honorable Tom Brower, Chair
Committee on Housing
House of Representatives
State Capitol, Room 438
Honolulu, Hawaii 96813

Dear Chair Brower:

Subject: Senate Concurrent Resolution 3 (SCR 3), Senate Draft 1 (SD 1) Convening a Task Force to Study the Issue of Residential Sprinkler Costs in New One- and Two-Family Dwellings

I am David C. Thyne, member of the Hawaii State Fire Council (SFC) and Fire Chief of the Maui Fire Department (MFD). The SFC and the MFD support SCR 3, SD 1, which proposes to convene a task force of various stakeholders to study the cost of installing automatic fire sprinkler systems in new one- and two-family dwellings.

The recent fire at the Marco Polo condominium on July 14, 2017, highlights the dangers of fire in unsprinklered residential buildings. According to the National Fire Protection Association's latest U.S. data, 92% of all civilian structure fire deaths resulted from home structure fires. Fatal residential fires occur in homes despite the presence of modern construction techniques and features, such as smoke alarms, fire-rated drywall, and Ground Fault Circuit Interrupter electrical outlets. Instead, they usually involve the actions and errors of the occupants in combination with the flaws and vulnerabilities of products brought into the home. Research conducted by the National Institute of Standards and Technology has shown that home fires become deadly in as few as three minutes. New and old homes alike are filled with these newer contents and furnishings, which provide less margin for success for smoke alarms and add to the need for fire sprinklers. Modern lightweight home construction products, especially wood truss roof systems and wood joists, can rapidly fail under fire conditions, an extreme risk to fire fighters responding to a fire. Automatic fire sprinkler systems have proven to be a solution to saving lives and property

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Life safety is a priority for the SFC and the MFD and we urge your committee's support on the passage of SCR 3, SD 1.

Should you have questions, please contact SFC Administrative Specialist Lloyd Rogers at (808) 723-7176 or lrogers@honolulu.gov.

Sincerely,



DAVID C. THYNE
Fire Chief



**TESTIMONY TO THE HOUSE COMMITTEE ON HOUSING
State Capitol, Conference Room 423
415 South Beretania Street
10:30 AM**

April 11, 2019

RE: S.C.R. 3, SD 1, CONVENING A TASK FORCE TO STUDY THE ISSUE OF RESIDENTIAL SPRINKLER COSTS IN NEW ONE- AND TWO-FAMILY DWELLINGS

Chair Brower, Vice Chair Matayoshi & members of the committee:

My name is Gladys Quinto Marrone, CEO of the Building Industry Association of Hawaii (BIA-Hawaii). Chartered in 1955, the Building Industry Association of Hawaii is a professional trade organization affiliated with the National Association of Home Builders (NAHB), representing the building industry and its associates. BIA-Hawaii takes a leadership role in unifying and promoting the interests of the industry to enhance the quality of life for the people of Hawaii. Our members build the communities we all call home.

BIA-Hawaii is **opposed** to S.C.R. 3 SD1, which proposes to create a task force to study the cost of mandating residential sprinklers in new one and two family dwellings.

In the 2017 legislative session, S.B. 611 SD1, HD1, CD1 was passed, which amended Act 83, SLH 2012 by extended the prohibition on the counties from mandating the installation of automatic fire sprinklers in new detached one- or two-family dwelling units an additional ten (10) years to 2027. Mandating the installation of automatic fire sprinklers is about housing affordability. As we are all aware, we are in a housing crisis in Hawaii. Mandating the installation of automatic fire sprinkler systems in all new one and two family dwellings will not keep new homes affordable for Hawaii's families. BIA-Hawaii is not against fire sprinklers, just the mandating of them.

In 2016, BIA Hawaii and the National Association of Home Builders commissioned a report analyzing the impact of mandating the installation of automatic fire sprinklers in Hawaii. The report obtained information from Hawaii contractors and developers on actual costs to install automatic fire sprinklers in Hawaii. The following are some of the findings:

Cost Breakdown	Oahu	Maui	Hawaii
Cost Analysis Fire Sprinkler Install	Two Story Home (Flag Lot) (Homeworks)	Cost Per Units-- 3 Plex, 2 Story (Stanford Carr)	Two Story Home
Size of Unit (SQFT)	3,794.00	1,905.00	2,000.00
DESCRIPTION			
Plans and Install of System	\$16,750.00	\$26,388.33	\$15,000.00



Site Work (Trenching for new water line)			
Added Permit cost	\$68.94	\$263.88	\$135.00
Fire Chief review(?) 10% of permit fee	\$539.00	\$290.27	\$1,500.00
Plumber additional cost to upgrade to 1" line	\$1,400.00		\$2,745.00
Plumber additional cost Regulator/backflow misc.	\$650.00		\$1,275.00
Painter -additional masking L&M	\$425.00	250	\$588.00
Drywall-additional cost of install	\$400.00		\$588.00
Electrician (wiring of bell/monitor stations)	\$300.00	1250	\$588.00
<i>Sum of hard costs</i>	<i>\$20,532.94</i>	<i>\$28,442.49</i>	<i>\$22,419.00</i>
G.C Overhead 15%	\$ 3,079.94	\$ 1,422.12	\$ 3,362.85
G.C.Profit 5%	\$1,180.64	\$1,422.12	\$1,120.95
GET	\$ 1,033.15	\$ 1,473.61	
Final Cost/Unit	\$25,826.67	\$32,760.34	\$26,902.80
Cost per sq.ft.	\$ 6.81	\$ 17.20	\$ 13.45

BIA-Hawaii is speaking out for the future home buyers in the state, who do not have an organized voice to raise concerns about increases to the price of housing in Hawaii. Any type of mandate to install fire sprinklers will increase the cost of housing in Hawaii. **We are not opposed to fire sprinklers being installed in one and two family residences, as long as this decision is OPTIONAL, and made by the homeowner.**

While we understand the intent of this resolution is to bring clarity to the issue of cost, we are opposed because we have already done the analysis as requested through this task force. However, if the legislature intends to continue down this path, we would suggest that some changes be made to the makeup of the task force. Because the stated intent of the task force is to "to study the costs of installing automatic fire sprinkler systems in new one- and two-family dwellings", designees 4, 5, 6, 7, & 8 on page 2, lines 28-42 of the resolution should be removed, as they will not provide input on the issue of cost. Further, we are concerned with the task force being made up of mainly government officials, as we do not believe this task force would produce fair and unbiased results.

BIA-Hawaii is opposed to S.C.R. 3, and appreciates the opportunity to provide our comments on the matter.