# Hawaii State Fire Council



## Current Status of the Reduced Propensity Ignition Cigarette Program in Hawaii

### Submitted to The Thirtieth State Legislature January 2018

### Table of Contents

#### **Executive Summary**

With the passage of Act 218, 2008 Legislative Session Hawaii became the 36<sup>th</sup> state requiring only RIPC be sold. The goal of this law is to reduce the number of fire caused by smoking-material and decrease injuries, fatalities, and property loss. By the end of 2011, RIPC laws were effective in all 50 states and the District of Columbia.

(see <u>http://www.capitol.hawaii.gov/hrscurrent/Vol03\_Ch0121-0200D/HRS0132C/HRS\_0132C-.htm</u>)

On January 16, 2014, a RIPC Program Specialist was hired to administer and enforce the RIPC Program. Support was solicited from the Department of Labor and Industrial Relations (DLIR) and the Department of the Attorney General's Tobacco Unit. Initial assignments included:

- Conducting retail inspections throughout the state to ensure that only "Fire Standard Compliant" or "FSC" cigarettes are being sold.
- Purchasing cigarette samples and submitting them to authorized laboratories for independent testing.
- Educating cigarette retailers and the public on the RIPC law and the prevention of fires.
- Learning and sharing best management practices being utilized by other states.

#### <u>Purpose</u>

This report is being submitted to the Hawaii State Legislature pursuant to Hawaii Revised Statutes (HRS) 132C-3(e) following the conclusion of each three-year RIPC certification period. The purpose for submitting this report is to provide an update on the accomplishments of the program from July 1, 2014 through June 30, 2017. Secondly, it is to provide recommendations for improving the effectiveness of Hawaii's RIPC law and enhancing the safety of Hawaii's population and its first responders with regard to injuries and fatalities as a result of fires, especially smoking related fires.

#### **State Fire Council**

The State Fire Council (SFC) is administratively attached to the DLIR and comprised of the four county Fire Chiefs. The primary mission of the SFC is to develop a comprehensive fire service emergency management network for the protection of life, property, and the environment throughout the state.

The SFC is responsible for adopting a state fire code, applying and administering federal firerelated grants, and administering the RIPC program.

The SFC may advise and assist county fire departments where appropriate and prescribe standard procedures and forms related to inspections, investigations, and reporting of fires. It also advises the Governor and legislature on issues relating to fire prevention, protection, life safety, and any other function or activity for which the various county fire departments are responsible. The SFC staff consists of two Administrative Specialists, one Secretary, and one RIPC Program Specialist. Salaries for the three positions are budgeted and reimbursed by appropriated funds

administered by the DLIR. The salary for the RIPC Program Specialist is obtained from certification fees received every three years from cigarette manufacturers.

#### **Smoking-Materials Fire Facts**

Between 2010 and 2014, U.S. fire departments responded to an average 358,300 home structure fires each year according to the National Fire Protection Association (NFPA). These fires caused an average of 2,520 civilian deaths, 12,720 injuries, and \$6.7 billion in property damage. Seventy-seven percent of reported home fires and 84% of fire deaths occurred in one- and two-family dwellings, including manufactured homes.<sup>1</sup> The leading cause of fires was cooking, at 46%, followed by heating equipment at 16%, and smoking materials at 5%. However, smoking materials was the leading cause of civilian fire deaths at 22%.<sup>2</sup>

Trash, mattresses, and upholstered furniture are the items most commonly ignited in smoking material home fires.<sup>3</sup> Among those under 18, the highest smoking-material fire death risk is children under age five. For adults, the death rates rise with age, until age 75 to 84 and declines at age 85 and over.<sup>4</sup> One out of four fatal victims of smoking material fires is not the smoker whose cigarette started the fire. Therefore, if others are present, they have a direct and indirect stake in taking action to prevent hostile fires from occurring. Of the fatal victims who were not the smoker, one-third (34 percent) were children.<sup>5</sup> Other victims of smoking material fires were neighbors (25%), spouses or partners (14%), parents (13%), and (14%) were other relatives or friends.<sup>6</sup>

The reduction of fire deaths, injuries, and property damages is accomplished by using all available means to achieve the desired result and RIPC is one of these means.

#### **RIPC Defined**

RIPC, also known as fire standard compliant or fire safe cigarettes (FSC), utilizes paper with two or three thin bands of less-porous paper that act as "speed bumps" to slow down a burning cigarette. If a RIPC is left unattended, the burning tobacco will reach one of the speed bumps and self-extinguish.<sup>7</sup>

<sup>&</sup>lt;sup>1</sup> Ahrens, Marty. (2016) *Home Structure Fires*. NFPA. 1 Batterymarch Park. Quincy, MA 02169-7471. Page i.

<sup>&</sup>lt;sup>2</sup> Ahrens, Marty, page ii.

<sup>&</sup>lt;sup>3</sup> Hall, John (2013) *The Smoking Material Problem*. NFPA Analysis and Research, Batterymarch Park. Quincy, MA 02169-7471. Page i.

<sup>&</sup>lt;sup>4</sup> Hall, John, page 29.

<sup>&</sup>lt;sup>5</sup> Coalition for FSC. (2011-a) Fast Facts. NFPA 1 Batterymarch Park. Quincy, MA 02169-7471.

<sup>&</sup>lt;sup>6</sup> Coalition for FSC. (2011-b) About Fire Safe Cigarettes. NFPA 1 Batterymarch Park. Quincy, MA 02169-7471.

<sup>&</sup>lt;sup>7</sup> Coalition (2011-b).



Hawaii's RIPC law does not apply to cigars; roll your own cigarettes, cigarettes sold on federal property; duty-free cigarettes; and devices known as E-cigarettes.

#### **<u>RIPC Regulatory History</u>**

The concept for a cigarette that would self-extinguish surfaced in 1929 after a smoking material fire in Lowell, Massachusetts (MA). Then MA Congresswoman Edith Nourse Rogers called for the National Bureau of Standards to develop a self-extinguishing cigarette. After three years of research, the concept was brought forward to the cigarette manufacturers, but was never implemented.

Senator Phil Hart of Minnesota introduced a bill to require self-extinguishing cigarettes in 1974, but was defeated by tobacco interests in the U.S. House of Representatives. In 1979, a grassroots campaign for fire-safe cigarettes endorsed by the American Burn Association and the International Association of Fire Chiefs was announced. In that same year MA Congressman Joe Moakley introduced a fire-safe cigarette bill to prevent future cigarette fire tragedies from occurring. In 1980, Senator Alan Cranston of California, and in 1984, Senator John Heinz of Pennsylvania, introduced a similar bill. Concurrent with the Congressional efforts, state fire-safe cigarettes bills were also introduced without success until 2000.

Congressman Moakley continued to spearhead the movement until his death on May 28, 2001. Senators Richard Durbin of Illinois, Samuel Brownback of Kansas, and MA Congressmen Edward Markey and Peter King of New York reintroduced Moakley's FSC Act.

Campaign organizers, together with the NFPA, realized that the political climate in Washington had become more hostile to cigarette regulation. So they redirected the campaign at the state level. In August 2000, New York became the first state to enact a cigarette fire safety law. Their regulatory process took three and one-half years and became effective June 28, 2004. Canada became the first country to require FSCs using the same test method when their law became

effective on October 1, 2005.<sup>8</sup> During the ensuing years, each of the 50 states passed their own versions of an RIPC law, which was based on New York's regulation.

#### **<u><b>RIPC Review for Hawaii**</u>

The effects of implementing Hawaii's RIPC law can be found in the next four key points of comparison and are also highlighted in the chart below. More details on these statistics can be found in Appendix A of this report. In the years following the passage of Hawaii's RIPC law, the number of building fires caused by cigarettes decreased by 19 percent (see Table 1). The total property and content losses from cigarette-related fires decreased by approximately 30 percent (see Table 1). Before the law from 2003 to 2009, there was one fire fatality attributed to cigarettes, and from 2010 to 2016, there was one death. However, the number of injuries from fires caused by more than 40 percent (see Table 1).

	<b>Building Fires</b>			
	caused by			
	Cigarettes	Total Property Loss	Injuries	Fatalities
Total	154	\$3,031,160	13	2
2003-2009	85	\$1,775,495	9	1
2010-2016	69	\$1,255,665	4	1
Change (%)	-19%	-30%	-44.4%	0%

#### Table 1. Statewide Cigarette-Related Statistics

In January 2014, a survey was created and distributed to each state. Only four states did not respond. MA was recognized as being the most diligent in administering and enforcing the RIPC law, and their information and procedures were utilized by Hawaii with similar forms, independent testing procedures, and product confiscation. Hawaii, Kansas and MA are the only states currently conducting independent testing. Representatives from Pennsylvania and Alaska requested information on the testing facilities being utilized by Hawaii, as they plan to begin independent testing.

Currently, a total of 796 brand/styles of cigarettes are approved for sale in the state. Field inspections revealed that less than half of these brand/styles are actually being sold in retail outlets. Every three years, manufacturers must submit documentation to recertify their product. A fee of \$375 must accompany each brand name/style certification. Each manufacturer can cease sales of their various products at any time, but fees are not refundable. In the last three years, four manufacturers discontinued its sales. It is estimated that this office will receive \$97,000 annually.

<sup>8</sup> Coalition for Fire Safe Cigarettes. (2011-c) *History of Fire-safe cigarettes*. NFPA 1 Batterymarch Park. Quincy, MA 02169-7471.

If surplus funding should be reduced to a critical level, the RIPC office would need to reevaluate and increase the fee to ensure that the program continues to be effective. Fees collected are used to cover ongoing program expense; including salaries and benefits, office supplies, travel, expenditures to conduct inspections, and other related duties stipulated in HRS 132C. Funds are also used to purchase cigarette samples and mailing for independent testing by an approved facility.

#### RIPC Accomplishments in Hawaii (July 1, 2014 through June 30, 2017)

- In March 2015, a draft of the RIPC Administrative Rules was submitted to the SFC's Deputy Attorney General (DAG) for review. Another updated draft was sent to the DAG in June 2017, and we are awaiting their comments and recommendations.
- Initial inspections of retail outlets commenced in 2015. During these inspections, most managers and staff in each retail outlet had no knowledge of the RIPC law. An informational brochure was created and distributed during subsequent inspections to educate employees and management. Educational efforts have been very successful.
- Initial inspections on Kauai, Maui, and Oahu have been completed (see Table 2).
- Inspections must be completed on Hawaii, Lanai, and Molokai (see Table 2).
- There are approximately 116 retail cigarette outlets located on military installations within the state of Hawaii (see Table 2). Since these retail outlets are under the jurisdiction of the federal government, no inspections were or plan to be conducted.

	Hawaii	Kauai	Lanai	Maui	Molokai	Oahu	Military	Statewide
Retail								
outlets	217	97	5	226	9	791	116	1461
Initial								
Inspections								
Completed	168	97	0	226	0	791	0	1282
Remaining	49	0	5	0	9	0	0	179
% of Initial								
Inspections								
Completed	77	100	0	100	0	100		88

Table 2. RIPC Initial Inspections Conducted

- To date, more than 1,300 field inspections have been completed (see Table 3).
- Re-inspections have commenced for retail outlets on Oahu.

	FY2010	FY2011	FY2012	FY2013	FY2014
Inspections Completed	0	0	0	0	0
	FY2015	FY 2016	FY 2017	FY2018	TOTAL
Inspections Completed	19	518	806	0	1343

Table 3. Total Inspections (FY2010-FY2017)

- More than 450 cigarette brand/styles were purchased and tested (see Table 4). Four packs of each cigarette brand/style are purchased, documented, packaged, and shipped to an approved testing laboratory for independent testing.
- In April 2017, this office received its first report of a test failure involving a Maverick-brand cigarette manufactured by ITG Brands, LLC. This office conducted follow-up testing on more Maverick-brand cigarettes. Subsequent results were positive and the ITG Brand Vice-President of Compliance was notified.
- RIPC fees collected to date total almost \$1,000,000 (see Table 4). 1
- As of June 30, 2017, the RIPC Special Fund balance was more than \$600,000. A major reason for this balance is that prior to the hiring of the RIPC Specialist, certification fees were being collected, but there were no expenditures.
- Current funding available in the RIPC Special Fund is sufficient to support the administration and enforcement duties. A surplus is favorable because of the uncertainty of future certification fee collection.

	FY2010	FY2011	FY2012	FY2013	FY2014	
Total Fees Collected	\$361,500	\$34,125	\$102,000	\$159,750	\$33,750	
Salary Expenses	\$0	\$0	\$0	\$0	\$16,924	
Office Expenses	\$0	\$0	\$0	\$0	\$0	
Brands Tested /Expenses	\$0 /\$0	\$0 /\$0	\$0 /\$0	\$0 /\$0	\$0 /\$0	
Travel Expenses	\$0	\$0	\$0	\$0	\$0	
Total Expenses	\$0	\$0	\$0	\$0	\$16,924	
RIPC Balance	\$361,500	\$395,625	\$497,625	\$657,375	\$674,201	

Table 4. RIPC Fees Collected & Expenses Incurred (FY2010-FY2017)

	FY2015	FY 2016	FY 2017		Totals as of 6-30-2017
Total Fees Collected	\$112,875	\$136,125	\$43,500		\$983,625
Salary Expenses	\$30,239	31,533	\$36,243		\$114,939
Office Expenses	\$1,111	\$2,286	\$3120		\$6517
Brands Tested /Expenses	75 /\$27,635	221 /\$103,307	163 /\$70,059		459/\$201,001
Travel Expenses	\$0	\$3,011	\$4,701	٤	\$7,712
Total Expenses	\$58,985	\$140,137	\$114,123		\$330,169
RIPC Balance	\$728,091	\$724,079	\$653,456		\$653,456

#### **Future Projects**

RIPC administrative rules are in progress regarding enforcement powers, product confiscation, penalties, and clarification of the statute. Also, an RIPC clerical position may be a future consideration.

#### **<u><b>RIPC Recommendations**</u>

**Recommendation 1:** The legislature is requested to support the installation of smoke alarms and residential sprinklers. If a fire occurs, properly installed and maintained smoke alarms provide an early warning signal to alert occupants of a fire condition. Residential sprinkler systems help to reduce the risk of deaths, injuries, and property damages. They activate 24 hours a day, seven days a week without human intervention or action to control or extinguish a fire. These automatic extinguishing systems will further reduce the 358,300 home structure fires, 2,500 fatalities, and more than 12,000 injuries that average yearly in the U. S.<sup>9</sup> The U. S. Fire Administration and fire service officials nationwide are working to promote and advance residential fire sprinklers. More information on costs, benefits, performance, training bulletins, public education, and outreach materials regarding residential sprinklers are available at: <u>http://www.usfa.fema.gov/prevention/technology/home\_fire\_sprinklers.html</u> Together, these two life-saving devices can reduce the risk of dying in a fire by 80%.<sup>10</sup>

<sup>&</sup>lt;sup>9</sup> Ahrens, Marty, page i.

<sup>&</sup>lt;sup>10</sup> NFPA (2014) *The Fire Sprinkler Initiative*. NFPA 1 Batterymarch Park. Quincy, MA 02169-7471.

**<u>Recommendation 2</u>**: The legislature is requested to support future bills for the SFC to use the RIPC special fund for program and activity costs for the benefit of Hawaii's community, in addition to continuing the administration and enforcement of the RIPC law.

#### **Conclusion**

RIPC appear to be the principal reason for a 30% decline in smoking-material fire deaths from 2003 to 2011. During the same period, the number of smokers fell by only about 4%. Changes in ignition-resistance mattresses and upholstered furniture have been underway for more than two decades and also contributed to the decline. The SFC will continue to monitor the effects that RIPC have in Hawaii. The SFC will continue to advocate for fire and life safety for the community through informative education by utilizing advances in engineering, and building and fire code enforcement.

An informational site visit to MA in Fiscal Year 2018 is being planned, along with a tour of the facility that MA utilizes to conduct its independent testing. A certified testing laboratory that currently tests cigarettes for Hawaii and the Phillip Morris manufacturing plant, which are located in Richmond, Virginia, will also be toured.

Comments or inquiries may be directed to:

Earle K. Kealoha Jr. RIPC Program Specialist <u>ekealoha@honolulu.gov</u> 808-723-7173 Hawaii State Fire Council

#### **Bibliography**

Ahrens, Marty. (2017) U.S. Experience with Sprinklers. National Fire Protection Association. 1 Batterymarch Park. Quincy, MA 02169-7471. Page 8. <u>http://www.nfpa.org/news-and-research/fire-statistics-and-reports/fire-statistics/fires-by-property-type/residential</u>

Coalition for Fire Safe Cigarettes. (2011-a) *Fast Facts*. National Fire Protection Association 1 Batterymarch Park. Quincy, MA 02169-7471.

http://www.nfpa.org/safety-information/for-consumers/causes/smoking/coalition-for-fire-safecigarettes/fast-facts

Coalition for Fire Safe Cigarettes. (2011-b) *About fire safe cigarettes*. National Fire Protection Association 1 Batterymarch Park. Quincy, MA 02169-7471. <u>http://www.nfpa.org/safety-information/for-consumers/causes/smoking/coalition-for-fire-safe-cigarettes/about-fire-safe-cigarettes</u>

Coalition for Fire Safe Cigarettes. (2011-c) *History of Fire-Safe Cigarettes*. National Fire Protection Association 1 Batterymarch Park. Quincy, MA 02169-7471 <a href="http://www.nfpa.org/safety-information/for-consumers/causes/smoking/coalition-for-fire-safe-cigarettes/history">http://www.nfpa.org/safety-information/for-consumers/causes/smoking/coalition-for-fire-safe-cigarettes/history</a>

Hall, J. R. Jr. (2013). *The Smoking-Material Problem*. National Fire Protection Association 1 Batterymarch Park. Quincy, MA 02169-7471. http://www.nfpa.org/~/media/Files/Research/NFPA%20reports/Major%20Causes/ossmoking.pdf

National Fire Protection Association. (2014) *The Fire Sprinkler Initiative*, 1 Batterymarch Park. Quincy, MA 02169-7471. http://www.firesprinklerinitiative.org/advocacy-tools/fact-sheets/myths-vs-facts.aspx

Year	Cigarette	% of All	Property	Contents	Total	Injuries	Fatalities
1 641	Fires	Fires	Loss	Loss	Losses	injunes	i atuntico
2003	85	23.0%	\$63,280	\$13,900	\$77,180	1	0
2004	63	17.0%	\$78,220	\$45,300	\$123,520	1	0
2005	47	12.7%	\$60,950	\$38,750	\$99,700	1	1
2006	14	3.8%	\$158,900	\$53,650	\$212,550	0	0
2007	22	5.9%	\$682,100	\$82,525	\$764,625	3	0
2008	23	6.2%	\$57,480	\$22,550	\$80,030	0	0
2009	19	5.1%	\$398,410	\$63,000	\$461,410	3	0
2010	21	5.7%	\$43,100	\$7,100	\$50,200	0	0
2011	9	2.4%	\$13,000	\$700	\$13,700	0	0
2012	15	4.1%	\$426,350	\$57,060	\$483,410	0	1
2013	14	3.8%	\$104,620	\$251,950	\$356,570	1	0
2014	9	2.4%	\$27,050	\$2,050	\$29,100	0	0
2015	13	3.5%	219,500	\$41,000	\$260,500	1	0
2016	16	4.3%	\$69,300	\$8,885	\$78,185	2	0
TOTAL:	370	100%	\$2,402,260	\$688,420	\$3,090,680	13	2

Appendix A: All Cigarette Fires (Honolulu) 2003 to 2016