Engineering Solutions to Mitigate Cooking Fires in Non-sprinkled Multifamily Occupancies within the Novato Fire Protection District

Erich W. Mesenburg

Novato Fire Protection District, Novato, California

National Fire Academy Executive Fire Officer Program

CERTIFICATION STATEMENT

I hereby certify that this paper constitutes my own product, that where the language of others is set forth, quotation marks so indicate, and that appropriate credit is given where I have used the language, ideas, expressions, or writings of another.

Signed:

Abstract

The problem addressed by this research was that the Novato Fire Protection District (NFPD) had not identified engineering solutions to mitigate cooking fires in non-sprinkled multifamily occupancies within the NFPD. Using the descriptive research method with the purpose to identify appropriate engineering solutions, this paper asked what the available engineering solutions were to mitigate residential cooking fires, what was involved in the installation of those solutions, what experiences public safety organizations had with the solutions, what local laws, codes, and ordinances applied to the installation of the solutions, and what the estimated cost per residential unit would be for each of the identified engineering solutions. Fire protection system installers and product representatives were interviewed, a survey was sent to public safety organization leaders, and a questionnaire was submitted to the NFPD Deputy Fire Marshal. Seven engineering solutions which could mitigate cooking fires in non-sprinkled multifamily occupancies were identified in the research which included the Guardian III, Denlar D1000, Stove Top Fire Stop, Home Senser, Stove Guard, Cook Stop, and the Safe-T-element. Short-term recommendations were made to review the identified solutions with the NFPD Fire Marshal, seek grant funding with approval of the Fire Chief, and partner with the local branch of U.S. Department of Housing and Urban Development. Long-term recommendations included creation of a comprehensive implementation plan for the selected engineering solution(s), identification of all potential costs to the NFPD, and posting of the research onto the NFPD website.

Table of Contents

	Page
Certification	2
Abstract	3
Table of Contents	4
Introduction	7
Background and Significance	8
Literature Review	13
Procedures	27
Results	30
Discussion	42
Recommendations	52
Reference List	55
Appendices	
Appendix A: NFPD Structure Fire Data 2009 - 2013	60
Appendix B: City of Novato Master Housing List for Multi-family Occupancies	72
Appendix C: NFPD List of Sprinklered Occupancies	77

Appendix D: Private Fire Protection Systems Installation Company Interview List125
Appendix E: Product specific interview #1 – Guardian III
Appendix F: Product specific interview #2 – Denlar D1000
Appendix G: Product specific interview #3 – StoveTop FireStop
Appendix H: Product specific interview #4 – HomeSenser
Appendix I: Product specific interview #5 – Stove Guard Guardian 2010135
Appendix J: Product specific interview #6 – CookStop
Appendix K: Product specific interview #7 – Safe-T-element
Appendix L: Residential Cooking Fire Mitigation Survey142
Appendix M: Fire Loss Management Questionnaire
List of Figures
Figure 1: Guardian III - Cabinet Storage
Figure 2: Guardian III - Nozzle Placement
Figure 3: Denlar D100033
Figure 4: StoveTop FireStop - Rangehood34
Figure 5: StoveTop FireStop - Microhood
Figure 6: HSE HomeSenser35

Figure 7: Stove Guard - Power Control Box	36
Figure 8: Stove Guard - Remote Sensor	36
Figure 9: CookStop	.37
Figure 10: Safe-T-element	.37
List of Tables	
Table 1: NFPD Structure Fires by Room of Origin 2009 - 2013	.12
Table 2: NFPD Cooking Fire Occupancies and Damage Cost Estimates 2009 - 2013	.12
Table 3: Leading Factors Contributing to Ignition in U.S. Home Cooking Fires:	
1999-2013	17
Table 4: Cooking Fire Mitigation Engineering Solution Costs	.52

Engineering Solutions to Mitigate Cooking Fires in Non-sprinkled Multifamily Occupancies within the Novato Fire Protection District

By the end of the day today in the United States, there will have been roughly one thousand home structure fires causing seven deaths, thirty-six injuries, and \$20,000,000 in property damage (Ahrens, 2012a). Whether reported to the fire department or not, cooking has long been the number one cause of those home structure fires and civilian home fire injuries (Ahrens, 2012b). In fact, cooking incidents cause nearly three times as many fires as the second leading cause of America's home fires (Ahrens, 2012a).

It comes as no surprise that cooking fires account for nearly 40% of home structure fires in the Novato Fire Protection District (see Appendix A). Of particular concern to the Novato Fire Protection District (NFPD) are cooking fires in non-sprinkled apartment buildings and other high density housing where potential for large dollar loss and civilian injury and death exist.

The majority of cooking fires are caused by human error, not by equipment malfunction (Moretti, 2010). Prevention technologies currently exist for use in home kitchens which can significantly reduce loss and injury from cooking fires (Dinaburg & Gottuk, 2011). The problem was that the NFPD had not identified these engineering solutions to mitigate cooking fires, specifically in non-sprinkled multifamily occupancies.

The purpose of this research was to identify engineering solutions to mitigate cooking fires in non-sprinkled multifamily occupancies within the NFPD. The descriptive research method was used and the following questions were posed:

1) What are the available engineering solutions to mitigate residential cooking fires?

- 2) What is involved in the installation of the available engineering solutions?
- 3) What experiences have other public safety organizations had with the available engineering solutions?
- 4) What local laws, codes, and ordinances apply to the installation of the available engineering solutions?
- 5) What is the estimated cost per residential unit of the available engineering solutions?

Background & Significance

The City of Novato lies north of San Francisco about 30 miles beyond the Golden Gate Bridge. Novato has 27 city parks and there are about 8,000 school age children. The average temperature is 67 degrees Fahrenheit and rainfall averages 27.5 inches per year in Novato (Novato Fire, 2009a).

The Novato Fire Protection District was formed in 1926 and covers an area of 71 square miles, 43 square miles of which includes unincorporated Marin County (Novato Fire, 2009a). Elevation ranges from sea level with access to the San Pablo Bay up to Big Rock Ridge, the district's highest elevation, at 1,887 feet. Winds are predominantly southwesterly with the exception of late summer when hot and dry off-shore northeast winds often penetrate the district (Novato Fire, 2009a)

The NFPD serves homes, businesses, and light industrial in its service area, as well as a long stretch of California highway 101. There are approximately 65,000 residents within the incorporated and unincorporated boundaries of the district, and another 25,000 workers within the district, which comprises the service population (Novato Fire, 2009a).

The Novato Fire Protection District provides all risk fire suppression and emergency management, basic and advanced rescue, emergency medical service including paramedic ambulance transportation, hazardous materials response, risk reduction, fire inspection, public education, plans review, and fire investigation response services (Novato Fire, 2009b).

The NFPD provides emergency services from five stations and an administrative building that accommodate 79 total personnel (57 firefighters, 9 command staff, and 13 administrative staff). The district maintains an inventory of equipment that includes 40 responding units and has an annual operating budget of approximately 24 million dollars (Novato Fire, 2009b).

One shining star of the NFPD administrative staff is the full-time Public Educator and Public Information Officer, Sandy Wargo. In addition to all things education, Wargo assists the NFPD Fire Marshal with fire loss management projects and community risk reduction programs. The researcher for this paper met with Wargo prior to attending the Executive Analysis of Community Risk Reduction (EACRR) course to assess the needs of community risk reduction at NFPD which would benefit from a focused Applied Research Project (ARP) for the National Fire Academy.

Wargo identified two areas of NFPD community risk which would benefit greatly by an ARP; elderly fall prevention and kitchen fire mitigation. Both topics identified by Wargo were in agreement with the first goal of the United States Fire Administrations (USFA) Strategic Plan (United, 2010a) and the Executive Fire Officer Program EACRR course (United, 2010b).

The researcher chose to focus this study on mitigating kitchen fires and specifically by identifying engineering solutions which could be used to retrofit non-sprinkled buildings.

Knowing that there exists a relationship between the NFPD and multifamily dwellings through code enforcement, and the fact that apartment dwellers experience more fires than occupants of

one or two family homes (Moretti, 2010), the researcher chose to further focus the study on just multifamily dwellings.

A comprehensive study was completed in 2009 by the Office of the Fire Marshall in Ontario, Canada, which found that stovetop fire incidents were more than two times higher in multi-unit buildings than in detached dwellings and three times higher in subsidized residential dwellings than in non-subsidized (Office, 2009). Anecdotally, a significant event occurred in Novato on February 2, 2013, when a cooking fire in a non-sprinkled apartment complex engulfed the kitchen of a unit, trapping three children inside (Three, 2013).

The primary goal of this research was to identify some good engineering solutions for non-sprinkled multifamily dwellings in the NFPD, and then establish a program to reduce community risk in that area utilizing some aspect of the research. Another benefit of this research will be the large collection of data then available for use in a risk reduction program directed at one or two family residences in the future.

To determine how many applicable occupancies this study would effect, the researcher cross referenced a list of all multi-family occupancies provided by the City of Novato (see Appendix B) with a list of all sprinkled occupancies provided by the NFPD (see Appendix C). The result of this investigation showed that there are 221 non-sprinkled multi-family buildings with 4 or more units providing a total of 2,687 presumably unprotected kitchens.

If allowed an estimate of 2 persons per unit just to understand the scale of the study, then this data would reflect that approximately 10% of Novato's population lives in non-sprinkled multi-family housing. This target hazard residence type is presumably older construction because the NFPD has required that all new residential construction be fitted with an automatic fire sprinkler system since 1988 (Novato Fire, 1988).

As participants in the National Fire Incident Reporting System (NFIRS), a database exists for information on the approximately 5,000 incidents responded to annually by the NFPD. All first alarm fire incident reports at the NFPD are completed by the first due company officer and all second alarm or greater incident reports are completed by the first due battalion chief.

While most incident reports tend to be fairly clear and concise, the data input into NFIRS may be inconsistent in nature from officer to officer. An example of this inconsistency is a fire starting as a pot on the stove that spread into the kitchen cabinets may be categorized by one reporting officer as a "cooking fire" and by another reporting officer as a "building fire." Also, dollar loss estimates may vary wildly and are usually based on the first due company officers initial opinion of the damage caused by the fire and possibly the water used in extinguishment. These dollar loss estimates tend to not reflect the true cost of returning a building to its prior condition including costs incurred by the buildings inhabitants should they need to relocate temporarily.

In an attempt to glean the most accurate picture of the NFIRS data as possible, the researcher combed through each fire report individually to vet the most accurate data possible for this study (see Appendix A). For incident reports that lacked key information like cause or room of origin, the researcher contacted personnel who either responded to the call or were part of the fire investigation. No adjustments were made to the original estimated dollar loss figures, though there is a good opportunity for future research into comparing company officer estimates to actual dollar loss.

Over the last 5 years (2009 - 2013), the NFPD responded to 164 confirmed structure fires, 67 of which were cooking type incidents (see Appendix A) and 81 of those 167 fires originated in the kitchen (see Table 1). Cooking fires accounted for \$738, 045 (see Table 2) in

estimated damage over the last five years which is roughly 15% of all fire losses (see Appendix A) in the NFPD during that period.

Table 1

NFPD Structure Fires by Room of Origin 2009 - 2013

NFPD 2009-2013					
Room of Origin	Building Fire	Chimney Fire	Cooking Fire	Fire, other	Grand Total
Attic	2	1	Tille	Other	2
Basement	2				2
Bathroom	4				4
Bedroom	6				6
Closet	5			1	6
Exterior/attached	21		1	2	24
Garage	7			2	9
Kitchen	12		66	3	81
Laundry	5			3	8
Living	16	9			25
Outbuilding				1	1
Roof	4				4
Unknown	1				1
Grand Total	85	9	67	12	173

Table 2

NFPD Cooking Fire Occupancies and Damage Cost Estimates 2009 - 2013

NFPD 2009 - 2013			
	Ψ.		
	Cooking Fire		
Row Labels 💌	Count of Incident #	Sum of Estimated Damage Cost - Total	
1 or 2 Family	34	536460	
Commercial	1	100	
Multi-family	27	196435	
Restaurant	2	3000	
Trailer	3	2050	
Grand Total	67	738045	

While the estimated dollar loss figures from cooking fires within the NFPD were relatively tame compared to the total dollar loss experienced by all fires, a significant finding in data showed that cooking fires accounted for 6 of the 8 civilian injuries recorded between 2009 - 2013 (see Appendix A).

The data collected by the researcher supported Wargo's research request for the NFPD, the USFA's strategic goal, and was relevant to the EACRR course in that there is an opportunity to reduce community risk by identifying engineering solutions to mitigate kitchen fires in non-sprinkled multifamily occupancies.

Literature Review

In order to identify engineering solutions to mitigate cooking fires in non-sprinkled multifamily occupancies with the NFPD, a literature review was performed on each of the five research questions.

The first research question asked simply what the available engineering solutions to mitigate residential cooking fires are. Dinaburg and Gottuk prepared a study in 2011 for the Fire Protection Research Foundation which was commissioned by the National Institute of Standards and Technology (NIST) with the objective to develop an action plan to mitigate home cooking fire loss using proven safety technologies.

The report created by Dinaburg and Gottuk (2011) was instigated by a Vision 20/20 workshop in 2010 (Vision) and its findings will help organize and categorize the available engineering solutions to mitigate residential kitchen fires throughout this paper. Dinaburg and Gottuk (2011) identified the existing products on the market as the following:

1. Home cooking fire suppression systems

(e.g., Guardian III, Denlar D1000, StoveTop FireStop)

2. Motion detectors to prevent unattended cooking

(e.g., HomeSenser, StoveGuard, Cookstop)

3. Contact burner temperature sensor and control

(e.g., Safe-T-element)

4. Over-range temperature sensor with burner control

(e.g., Innohome Stove Guard)

5. Smoke detection with burner control

(e.g., Fidepro)

The most common home kitchen suppression system in the literature was, of course, the residential wet pipe sprinkler, which has sprinkler heads directly attached to pipes containing water under pressure. Diekman, Ballesteros, and Ahrens (2010) stated that wet pipe sprinklers can react in as little as 35 seconds to extinguish a fire. The death rate per 1000 reported residential fires was 83% lower in homes with sprinklers compared to homes with no automatic extinguishing system and the costs associated with installation had decreased in communities where sprinkler ordinances had been in place for greater than 5 years (Diekman, Ballesteros & Ahrens, 2010).

Because this research was focused on realistic, cost effective retrofits for older existing multi-family occupancies, wet pipe residential sprinklers were not studied further in this paper. The costs associated with retrofit fire sprinkler plan design, system calculations, water supply issues, and bringing an older building into local fire sprinkler code compliance makes this option impractical for this study.

One feasible wet suppression system found for residential cooking fire mitigation was the Guardian III by Guardian Safety Solutions International, Inc. (Guardian, 2013). The Guardian

specification sheets showed that the system consists of a 5 pound liquid suppression agent filled cylinder stored in the cabinetry above the stove, a heat sensing module, and two magnetic nozzle assemblies. When a stove-top fire occurred the sensor would activate at around 365 degrees Fahrenheit and signal the central processing unit (CPU). This CPU sent a signal to release the extinguisher valve assembly, discharging the wet agent, and simultaneously activated the integrated alarm. Accessories were available per the owner's manual for the Guardian which included a gas or electric supply shut off and a manual pull station, all of which tied into the CPU and could be wired into an existing fire or security alarm panel (Guardian, 2013). The Guardian was shown to have met the Underwriters Laboratories (UL) testing standards for Subject 300A, Extinguishing System Units for Residential Range Top Cooking Surfaces (Underwriters, 2013).

Another UL 300A tested wet chemical residential cooking fire suppression system already in use around the country was the Denlar D1000. The D1000 was found to be similar to a commercial hood with fire suppression, but designed to be used in a high use residential setting like a fire house, a church kitchen, or a managed care facility (Denlar, 2013). The Denlar D1000 range hood system shipped fully integrated with the factory pre-charged AMEREX 660 filled suppressant canister within the hood. In addition to the nozzles and fusible links within the bell of the Denlar hood, there was another fusible link and nozzle within the plenum at the duct run access point. According to the Denlar D1000 White Paper (Denlar, 2013), available options included alarm system communication, cooking element disconnect, and grease screening and capture.

Also of note was that the D1000 used a two stage temperature monitoring system to minimize the chance of fire and the mess of a discharge. At the mid temperature point, the D1000 hood fan automatically turned on high to dissipate heat. Then at a high temperature point, the D1000 system disconnected the cooking element (if installed), prior to activation of the wet chemical suppression. If the heat continued to rise after the two pre-suppression stages had progressed, then the fusible links would melt and the wet chemical was discharged onto the range (Denlar, 2013).

Perhaps the simplest engineering solution discovered for home cooking fire suppression systems was the StoveTop FireStop by Williams-Pyro, Inc. The device consisted of a 12-ounce dry chemical filled can which resembled a large tuna can that had a fuse on the bottom and a magnet on top. The literature available on the StoveTop FireStop system showed that when flames reached the fuse, the can would pop open and dry chemical would rain down onto two burners using gravity (StoveTop, 2013). There were no additional safety features integrated into this system beyond extinguishment of small residential frying pan fires and the system was not designed for use with deep fat frying fire safety (StoveTop, 2013).

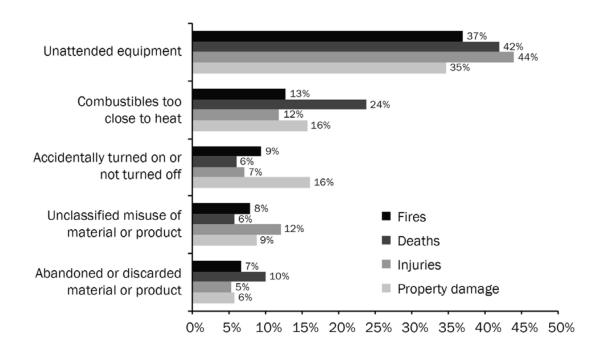
While millions of units had been sold since 1972 and StoveTop FireStop had been tested and certified to sections of several UL standards, the product was not UL listed. Williams-Pyro, Inc. said that their product was so unique that there simply was not a UL standard that completely applied (StoveTop, 2013). The StoveTop FireStop did perform well in an independent NIST study where the researchers found that the product extinguished a large stovetop oil fire quicker and with less damage than a traditional water sprinkler (Madrzykowski, Hamins & Mehta, 2007).

The U.S. Fire Administration published a comprehensive report in 2007 (Ahrens, et al.) on behavioral mitigation of cooking fires and found that unattended cooking equipment was the leading factor contributing to cooking fires, cooking fire related property damage, and cooking fire related injuries and deaths (see Table 3).

Leading Factors Contributing to Ignition in U.S. Home Cooking Fires: 1999-2003

(Ahrens, et al. 2007)

Table 3



One engineering solution developed to combat the problem of unattended cooking equipment fires was the integration of motion sensing technologies into the utility supply of the stove. The HomeSenser Electric Stove Senser – HSE UniWire was one such device that had a power control unit which could be hard-wired into an electric range and a remote sensor which monitored activity in the kitchen (Eisinger, 2013).

The HomeSenser allowed normal user operation of the stove while motion was sensed, but when six minutes of no activity was recognized by the HomeSenser, flashing lights and audible alerts attempted to bring the user back to the kitchen. The lights and alerts continued for two minutes unless motion was detected. If motion was detected then the system continued to operate normally with the constantly restarting 6 minute timer, but if no motion was detected, the HomeSenser shut the stove off. The stove could be turned back on and the system reset once the user followed a simple restart procedure. Although the model of HomeSenser researched was for use only with electric ranges, the HSE company was developing a HomeSenser model for gas stoves and a CommonSenser for use with 110 volt appliances like heaters and toaster ovens (Eisinger, 2013).

Another motion sensing fire prevention product found on the market was the Stove Guard by Stove Guard International Ltd. The Stove Guard website (Stove Guard, 2013) showed that they had models available for a regular electric range, an electric cooktop, or a natural gas fed stove. The Stove Guard consisted of the power control box either plugged or hard wired into the back of the stove with a sensor wire leading up to the motion sensing Electronic Monitoring Unit (EMU). The EMU could be set to shut down power to the stove after an adjustable period of inactivity and the timer would reset once motion was detected. Options to the Stove Guard system included a password locking option, an audible alarm, and a "relay-out feature" that would send a signal to an external monitoring device whenever Stove Guard disabled the stove (Stove Guard, 2013).

A third motion sensing cooking fire prevention product was discovered during the literature review process called CookStop (2013). Designed only for electric stoves at the time

of this research, the CookStop had seven different models available, depending on the wiring needs of the particular stove. The CookStop consisted of the monitoring controller, the power controller device, and a communication cable. The monitoring controller sensed motion in front of the stove and automatically reset the CookStop timer to whatever countdown the users were to input. If the timer ran out before motion was detected, the CookStop would alarm and shut down the power to the range (CookStop, 2013).

In a report issued to the United States Consumer Product Safety Commission, Little (2001) organized hundreds of existing patents, products, technologies, systems, and concepts which became the basis for much of the current literature available that addressed surface cooking fires. One of the more promising fire mitigation technology classes identified by Little (2001) was to prevent food ignition by limiting the temperature at the bottom of the pan. The concept being that if the ignition temperature of the pan is never reached, the process is automatic, and the technology requires no intervention from the user while cooking, then there is a high probability that a cooking fire can be avoided. One such product found to be widely available to the public was the Safe-T-element, by Pioneering Technology Corp.

The Safe-T-element cooking system involved replacing electric coiled stovetop burners with solid cover plates that were electronically controlled by a Safe-T-element control unit to not allow the burner plates to heat above 350*C/662*F (Pioneering, 2013). The pre-set high temperature cut off of the Safe-T-element was found to be below the ignition temperature of oil and most common cooking materials but well above the temperature required for efficient and effective cooking (Pioneering, 2013).

An interesting additional benefit to installation of the Safe-T-element which had helped it gain popularity with various housing authorities had been the energy efficiency of the system combined with the fire safety; in fact, Pioneering Technology Corp. stated that it had more than 90,000 systems installed in multi-family residential housing throughout the world (Pioneering, 2013). Pioneering Technology Corp. announced in September, 2013 that they would be partnering with Siemens Industry Inc's Building Technologies division to install 1,255 Safe-T-element systems in multi-family residential housing for the Metropolitan Development and Housing Agency in Nashville, Tennessee (Marketwatch.com, 2013).

Another category Dinaburg and Gottuk (2011) identified as engineering solutions to mitigate residential cooking fires was over-range temperature sensor with burner control. The Innohome Stove Guard was discovered to be able to cut gas or electric supply to the stove if it detected high temperatures above the stove, found the rate of rise in cooker surface temperature was too extreme, or identified that a burner had been left on for too long without being adjusted (Innohome, 2013). Innohome Stove Guard also had the ability to respond to other gas, fire, or carbon monoxide alarms and the system could transmit an alarm using a telephone service (Innohome, 2013).

One final category identified by Dinaburg and Gottuk (2011) for mitigation of residential cooking fires was smoke detection with burner control. The only available product found in the literature research was the Fidepro Intelligent Smoke Alarm from Fidepro Oy Ltd. based in Finland who stated that they had the world-wide patent on the technology (Fidepro, 2013). Its website claimed that when the Fidepro Intelligent Smoke Alarm detected smoke, it cut off

electricity to any number of electrical outlets or appliances as predetermined by the user (Fidepro, 2013).

The second research question asked what was involved in the installation of the available engineering solutions. Per their website, the Guardian residential range-top fire suppression system was designed to be installed by a handy homeowner or contractor in less than an hour (Guardian, 2013). The Guardian III installation manual (Guardian, 2013) illustrated a pre-assembled extinguisher module, sensor assembly, distribution/nozzle assembly, and one shutoff for electrical or gas stoves. The researcher's opinion was that the homeowner installing a Guardian system would have to be fairly savvy with home repair knowledge to feel comfortable installing the system, but it was possible.

The other two home cooking fire suppression systems researched were the Denlar 1000 and the StoveTop FireStop. The StoveTop FireStop installation was complete once attached magnetically to the underside of a metal vent hood over two burners, allowing almost anyone to be able to install the product. There was a fastener kit available for non-adhering surfaces and there was a version available for ranges with the microwave above the cook top surface called the StoveTop FireStop Microhood (StoveTop, 2013). The Denlar D1000 was a sophisticated stainless steel pre-engineered hood and duct system with integral safety shut-off and remote pull station which would require professional installation.

Installation requirements involved with the three motion detectors to prevent unattended cooking were found to be fairly similar to each other. The HomeSenser, the StoveGuard, and the CookStop were able to be installed by an experienced homeowner or average contractor. All

three systems involved connecting a control module, an electric/gas shut off, and the motion sensing apparatus (Eisinger 2013, StoveGuard 2013, CookStop 2013).

The only product evaluated with contact burner temperature sensor and control was the Safe-T-element which had two installation options: option number one was to have a professional install the fairly complicated system that involved adding a control module, attaching thermocouples and plates to the burner elements, and rewiring most of the stove, or option number two was to have the Safe-T-element actually installed on a new stove at certain manufacturers prior to delivery to the end user (Pioneering, 2013).

Innohome Stove Guard, the over-range temperature sensor with burner control product evaluated, had a fairly simple installation as the heat sensor, alarm system, and gas/electric supply shut off were all wireless. An electrician could be needed for the electric supply shut off on the Stove Guard if the connection to the stove was not a simple plug and socket (Innohome, 2013).

The smoke detection system with burner control evaluated was the Fidepro Intelligent Smoke Alarm which requires installation by an authorized installation technician (Fidepro, 2013). The Fidepro system was designed to shut power down to entire areas of a home when activated, so the use of the technician and/or electrician was definitely necessary.

The third research question of this study asked about the experiences of other public safety organizations with the available engineering solutions. Rouse (2012) identified that the Guardian system had been successful with specializing in protection of small residential stoves in public assembly areas where fire protection is required by the local authority having

jurisdiction (AHJ), such as healthcare facilities, apartments, day care centers, churches, universities, and retirement communities.

The Denlar D1000 produced a comprehensive "white paper" to help code officials approve the use of their system for what they refer to as "not for profit" cooking application with examples given as churches, managed care facilities, fire houses, etc. (Denlar, 2013). Various housing authorities had worked with Denlar to install D1000 systems in low income multi-family occupancies and Denlar noted a case study on their website of an incident with the Bridgeport Housing Authority of Bridgeport, CT (Duffy, 2009).

A wealth of information was available during the literature review on public safety organizations working with StoveTop FireStop. Dozens of fire departments were found to have written successful grant applications used to purchase StoveTop FireStop canisters for their communities (StoveTop, 2013) and several recent EFO ARP papers have recommended their usage (Cannaday, 2012; Farmer, 2012; Olson, 2007).

Born from a husband and wife team that wanted to protect the husbands aging mother, the HSE HomeSenser was created with the help of the Akron Metropolitan Housing Authority (Eisinger, 2013). The HomeSenser continued its relationship with the local housing authorities in Ohio and multiple organizations that provide affordable housing for seniors and individuals with mental health issues (Eisinger, 2013).

With 5.4 million people diagnosed with Alzheimer's disease in North America, Uhrich (2008) originally marketed the Stove Guard for those customers with special needs but then opened up the technology to all multi-unit managed housing developments. Stove Guard worked

with home care workers, occupational therapists, and fire prevention experts to upgrade their product in 2010 (Stove Guard, 2013).

The CookStop was developed originally to protect seniors, but the company also was found to market to student housing, busy families, families with latchkey kids, and people with disabilities (CookStop, 2013).

One product with a lot of experience working with public safety organizations was the Safe-T-element which was actually invited to participate in a Vision 20/20 workshop of kitchen fire prevention technologies in 2010 which was funded by the Department of Homeland Security, State Farm Insurance, and the Institute of Fire Engineers US Branch (Vision, 2010). Safe-T-element has partnered with multiple senior facilities, housing authorities, universities, college housing managers, military housing officials, extended stay hotels, and special needs housing facilities and has installed thousands of units using FEMA grant money (Pioneering, 2013).

The Innohome Stove Guard and Fidepro Intelligent Smoke Alarm were popular in the United Kingdom and in Scandinavia, but neither product had migrated to the United States, so no information was applicable for experience with public safety organizations.

The fourth research question in this study explored what local laws, codes, and ordinances apply to the installation of the available engineering solutions. Literature found during the research showed very specific documentation from the NFPD Fire Loss Management Division regarding fire sprinkler systems (Novato, 2005) as they were required in every newly

constructed building and facility within the NFPD (Novato, 2010), however, information about installing the alternative residential cooking fire mitigation solutions was less clear.

The NFPD adopted into local ordinance (Novato, 2013) the California Fire Code (CFC) which was Part 9 of Title 24 in the California Code of Regulations. No NFPD ordinance language referenced cooking fire mitigation engineering solutions that were not specifically fire sprinklers, so the 2013 CFC was consulted (California, 2013). The engineering solutions identified in this research appeared to be interpreted in the CFC 901.4.2 as non-required fire protection systems and code requirements for such systems were spelled out in detail.

The fifth and final research question posed in the literature review of this topic asked what the estimated cost was of the engineering solutions per residential unit. The costs associated with these estimates were based only on existing information from websites and generic vendor quotes. There existed an opportunity to reduce cost with bulk purchases, General Services Administration (GSA) pricing, grant opportunities, and community partnerships. Also, of note for this section, labor costs could vary wildly, so the researcher chose to capture just the equipment cost.

The first home cooking fire suppression system discussed in this literature review was the Guardian III model G300B system which had a manufacturer's suggested retail price (MSRP) of \$1,885 for an electric range or \$2,200 for a gas range (Integrated, 2013). Accessories available for the Guardian III included an AC/DC adapter (\$35), pull station (\$275), alarm system interconnection (\$185), alarm/strobe combination (\$340), and recharge kit (\$95). The Guardian Safety Solutions International, Inc. was found to operate out of Dallas, Texas, but they utilized

product vendors around the country who were found to be selling the Guardian III system 10% to 20% below MSRP.

Finding information on a purchase price for the Denlar D1000 series residential cooking fire protection hood out of Chester, Connecticut was difficult as the Denlar qualified distributor for the researcher's area was not familiar with the product. Contact was made with the North American Distribution Manager for Denlar Fire Protection who gave the MSRP of the D1000 series as \$5,000 to \$6,000 and the Designer Series (DS) as \$1,500 to \$2,000.

While based out of Fort Worth, Texas, the StoveTop FireStop was widely available and easily found on different distributor links from their website. The StoveTop FireStop could be purchased for around \$50 for a pair of canisters which could cover four burners (StoveTop, 2013). Also, the Microhood, used with StoveTop FireStop canisters when a microwave was directly over the range, was found for about \$85 and covered four burners.

At \$330, the HSE HomeSenser was found available directly from the husband and wife team in Akron, Ohio, who created the product (Eisinger, 2013). The Stove Guard model Guardian 2010 was available out of Saskatchewan, Canada on their website at \$400 for the electric range and cooktop versions or \$500 for the natural gas option (Stove Guard, 2013). There would be no tax applied on orders shipped to the USA (Stove Guard, 2013).

Two other products found to be based out of Canada were the CookStop which had all seven models available from the manufacturer for between \$359 and \$395, depending on the wiring needs of the stove (CookStop, 2013), and the Safe-T-element which was available

through select distributors as a retrofit or pre-installed on certain new stoves for around \$225 (Pioneering, 2013).

The Innohome Stove Guard and the Fidepro Intelligent Smoke Alarm were both out of Finland and not available in the United States.

Procedures

The descriptive research method was used for this study and the research questions were addressed using interviews, a survey, and a questionnaire.

To answer the first research question about what are the available engineering solutions to mitigate residential cooking fires, interviews were conducted with fire protection systems companies who were involved in installing residential kitchen fire protection within the greater San Francisco Bay Area and interviews were also conducted with product representatives of the seven available engineering solutions discovered in the literature review.

The fire protection system installer interviewees were selected using internet searches and local Bay Area yellow pages with the purpose to gain insight from fire protection industry representatives into the existing engineering solutions used to mitigate residential cooking fires (see Appendix D). The product representative interviewees were selected by calling the home office of each company and asking for the most appropriate person available to answer the research questions (see Appendices E, F, G, H, I, J, and K).

The second research question inquired about what was involved in the installation of the available engineering solutions to mitigate residential cooking fires in non-sprinkled multifamily residences and the third question asked what experiences public safety organizations had with the products. The fourth research question explored which laws, codes, and ordinances

applied to the installation of the engineering solutions and the fifth question wanted to know the cost.

Documented interviews were performed with product representatives for each of the seven specific devices identified as engineering solutions in the literature review which were available in the United States (see Appendices E, F, G, H, I, J, and K) in order to provide some answers to the second, third, fourth, and fifth research questions. Similar interview questions were asked of each representative in an attempt to gather accurate, comparable data about each product.

The interview questions asked of the product representatives were:

- 1. What is your relationship with the company and what is your experience with the product?
- 2. What is involved in the installation of the product?
- 3. Have you partnered with any public safety organizations or housing authority entities on purchasing and/or installing your product?
- 4. What codes, laws, ordinances, or rules do you reference when installing your product?
- 5. How much does the product cost?

For the Guardian III system, a telephone interview was obtained on 12/17/13 with Belle Pagan, a member of the Guardian Safety Solutions, Inc. sales team from Guardian's home office in Dallas, Texas (see Appendix E). On 1/7/14, Telephone contact was made with Jennifer Decataldo, the North American Distribution Manager of Denlar Fire Protection in Chester, Connecticut, (see Appendix F). The next phone interview conducted was with Ray Harris on 12/17/13 in Fort Worth, Texas, at StoveTop FireStop where Mr. Harris had been an account manager for 10 years (see Appendix G).

Another product specific interview conducted via telephone on 11/19/13 was with Debbie Eisinger, Chief Executive Officer of HomeSense Enterprises, LLC, maker of the HomeSenser in Akron, Ohio (see Appendix H). Stove Guard manager Charlotte Uhrick was interviewed on 12/17/13 by telephone from her office in Saskatchewan, Canada (see Appendix I). On 1/6/14, Mike Chase, the Vice President of Sales and Marketing of CookStop, was interviewed over the telephone (see Appendix J). The Chief Safety Officer of Pioneering Technologies, Earl Diment, was interviewed over the phone on 11/19/13 for his intimate knowledge of the Safe-T-element (see Appendix K).

In addition to interviewing the product representatives about their experiences with public safety organizations in the above procedure, a survey was developed with the purpose of asking key public safety leaders about their experiences with the available products. The survey was created on 10/1/13 on the SurveyMonkey website at www.surveymonkey.com and was launched on 11/13/13.

The survey was titled Residential Cooking Fire Mitigation (see Appendix L) and was sent to all of the researchers' contacts from the Executive Fire Officer's Program at the National Fire Academy. The survey was also forwarded from NFPD Deputy Fire Marshal Lori Jessell to all of her fire prevention contacts with a note from the researcher regarding the survey's purpose.

To encourage a good response to the survey, the researcher only used the two groups of contacts that had a personal relationship with the person asking for information. The total population of key public safety organization contacts who received the survey was probably around one hundred, depending on how many times the survey was forwarded without the researcher's knowledge, and the researcher received 30 responses.

No reliable statistical sample was intended by the survey as it was rather designed to gather interesting anecdotal information about the experiences of some public safety organizations in various regions around the U.S. The limitations of the survey were multiple and included the lack of survey building experience by the researcher and an absence of incentive to complete the survey.

The last procedure used in the research was a questionnaire submitted to NFPD Deputy Fire Marshal Lori Jessell on 12/22/13 entitled Fire Loss Management Questionnaire (see Appendix M). The questionnaire aimed to answer the fourth research question regarding laws, codes, and ordinances which apply to the installation of the available engineering solutions to mitigate residential cooking fires. Deputy Fire Marshal Jessell was selected for the questionnaire because of her twenty years of experience in fire loss management and her excellent knowledge of fire prevention, especially as it relates to the NFPD.

Results

Discovering which engineering solutions were available to mitigate residential cooking fires was the first research question. Dinaburg and Gottuk (2011) helped to organize the solutions into five categories, but no products were available in the US for two of the categories, so this research focused on the remaining three; home cooking fire suppression systems, motion detectors to prevent unattended cooking, and contact burner temperature sensor and control.

A total of seven different products met the intent of the research. The residential cooking fire suppression systems studied in this research included the Guardian III, the Denlar D1000, and the StoveTop FireStop. The motion detectors to prevent unattended cooking which were found to be available were the HomeSenser, the StoveGuard, and the Cookstop. The Safe-T-element was the only contact burner temperature sensor and control product discovered.

Telephone interviews with each of the seven specific engineering solutions found that their products were readily available either on their website or through various vendors across the United States (see Appendices E, F, G, H, I, J, and K). Additional phone calls to twenty different companies (see Appendix D) who provide residential fire protection service installation in the San Francisco Bay Area revealed that no known local companies provided residential cooking fire protection other than fire sprinklers or manually operated dry chemical fire extinguishers.

The second research question explored what was involved in the installation of the available engineering solutions. For the suppression systems, Pagan (see Appendix E) said that a licensed installation professional could install a Guardian III system in a kitchen somewhere between 35 minutes to an hour. Pagan (see Appendix E) said that it is necessary to have the right hood and cabinetry configuration to make the Guardian system work as designed. There must be cabinets above the range (see Figure 1) to store the extinguisher assembly while also providing an area from which a hole can be drilled that allows attachment of the temperature sensors and distribution assemblies above the range. Pagan (see Appendix E) also noted that the range needs to have a center mounted light and fan configuration (see Figure 2) so that the sensors and nozzles could be mounted magnetically in the correct locations.

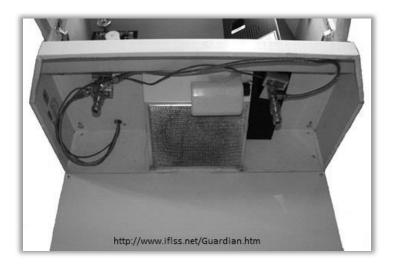
Figure 1

Guardian III - Cabinet Storage



Figure 2

Guardian III - Nozzle Placement



The other wet chemical UL300A tested fire suppression system studied, the Denlar D1000, comes fully integrated said Decataldo (see Appendix F). Decataldo confirmed that the units were sold pre-charged with suppressant and already had installed the required fusible links and nozzles (see Figure 3). Decataldo (see Appendix F) stated that an electrician may be required for the installation, but an HVAC technician or fire protection system installer could probably complete the job.

Figure 3

Denlar D1000



The StoveTop FireStop installation was said to be very simple by Harris (see Appendix G). Harris (see Appendix G) said installing the StoveTop FireStop involved only industrial strength magnets for ranges with a hood directly above the stovetop (see Figure 4) or a few screws to anchor the system for ranges with a microwave above the burners (see Figure 5).

Figure 4

StoveTop FireStop - Rangehood

www.stovetopfirestop.com

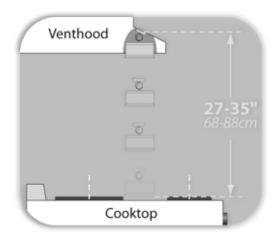
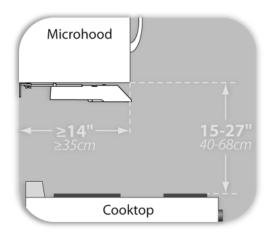


Figure 5

StoveTop FireStop - Microhood

www.stovetopfirestop.com



The three motion detector systems discovered in the research had fairly similar installation requirements, but the HomeSenser did not offer a model with a simple plug receptacle to manage power supply to the range (see Figure 6). Eisinger (see Appendix H) stated that she and the product inventor did not want the device to be easily removed or tampered with

specifically because of their work with mental health organizations and the elderly, so they made the unit hardwired only.

Figure 6
HSE HomeSenser



One of the other motion sensing cooking fire prevention products researched was the Stove Guard. Ulrich (see Appendix I) said that the installation of their most popular model required only that the user plug the electric range into their power control box (Figure 7) and then mount and attach the motion sensor/timer near the stove (Figure 8).

Figure 7
Stove Guard - Power Control Box



Figure 8

Stove Guard - Remote Sensor



The CookStop motion sensing product had a very similar installation to the Stove Guard, but CookStop (see Figure 9) offered several different models to suit multiple types of electric stoves according to Chase (see Appendix J). Chase (see Appendix J) said they designed their product with so many wiring options to make sure that the stove would not only be safe, but also would slide back against the wall and fit flush. Mounted to the underside of an upper kitchen cabinet, Chase said that the controller connects to the power shut off brain with a type of Ethernet cable (see Appendix J).

Figure 9

CookStop



The only product found in the research which controlled the temperature from the stove to the pan to prevent ignition was the Safe-T-element. Diment (see Appendix K) told the researcher that the Safe-T-element could be installed by one of their qualified installation technicians or even from the factory on some new stoves (see Figure 10).

Figure 10

Safe-T-element



The third research question posed in this study asked about the experiences public safety organizations have had with the products discovered in this research. This third research question was approached from two sides in that the researcher received information from thirty different fire department connections in a survey about their experiences with the products (see Appendix L), and the researcher also obtained information in interviews with the seven product representatives as to their experiences working with public safety organizations (see Appendices E, F, G, H, I, J, and K).

The survey reached public safety organizations from coast to coast and displayed a good mix of service populations with about half of the respondents serving less than 100,000 customers and half serving more (see Appendix L). 50% of the organizations that responded required fire sprinkler systems on all residential occupancies, 82% required them in multi-family dwellings, and 10% of the organizations did not require fire sprinklers in residential units at all (see Appendix L).

Of the thirty organizations polled, 20% were not sure of the percentage of their residential structure fire responses which were caused by cooking, but 13% knew that cooking caused 40-60% of their responses (see Appendix L). 16% of the respondents said that cooking caused between 20% and 40% of their fire responses. Half of the organizations surveyed thought that cooking accounted for less than 20% of their fire responses (see Appendix L).

When asked if the organization had explored using any of the engineering solutions identified in this research to help mitigate cooking fires in non-sprinkled buildings, one department had experience with the Guardian, one had experience with the Safe-T-element, and two had experience with the StoveTop FireStop (see Appendix L). The great majority of the organizations questioned had not explored any engineering solutions to help mitigate cooking

fires in non-sprinkled buildings and one third of them stated that their department focused solely on education (see Appendix L).

Of the few organizations surveyed that had some experience with the products found in this research, none obtained grant money or community partnerships (see Appendix L). Prevention Captain Marshall of the Contra Costa County Fire Protection District (CCCFPD) stated that a sprinkled senior apartment complex with a propensity for cooking fires in his District had installed three hundred Guardian units to try to minimize water damage from the fire sprinklers (see Appendix L). The Guardian installations were fairly recent so Marshall did not have information of their effectiveness, but he was able to state that the end users paid for the systems and that the systems were installed using the CFC and UL 300E compliance (see Appendix L).

Assistant Fire Marshal Chad Stangeland of the Moorhead Fire Department had a little bit of experience with the StoveTop FireStop in that his department recommended the product to some of their senior living facilities (see Appendix L). Stangeland stated that the purchases of the units were the responsibility of the residents and that no codes or ordinances applied to the installation in his part of Minnesota (see Appendix L).

As for the experiences that the product representatives have had with public safety organizations, Pagan (see Appendix E) said that the Guardian system has had a long standing relationship with the United States military, both domestically and overseas. Pagan (see Appendix E) said that the Guardian was well suited in assisted living facilities, fire stations, universities, churches, and some commercial building break rooms.

The Denlar system was used frequently in Housing and Urban Development (HUD) subsidized low-income households, among many other residential settings said Decataldo (see

Appendix F). Decataldo (Appendix F) also said that the Denlar specialized in the healthcare setting and in not-for-profit organizations such as most churches.

Harris (see Appendix G) said that StoveTop FireStop had been partnering with the military for forty years. Also noted by Harris (see Appendix G) was that StoveTop FireStop was very popular with housing authorities and HUD areas all over the United States.

When asked about partnerships between the HomeSenser and public service organizations, Eisinger (see Appendix H) said they had worked with fire departments, mental health organizations, and various other locations in the public domain. Eisinger (see Appendix H) also said that HomeSenser was involved with Area Agency of Aging and Partners for Safety.

Possibly coming to 3000 United States based chain restaurant kitchens soon, the Stove Guard was found to be most popular in senior living communities and individual homes due to recommendations by home health care professionals said Uhrich (see Appendix I). No clear relationships existed between Stove Guard and any public organizations according to the interview (see Appendix I).

Originally developed for seniors, said Chase (see Appendix J), the CookStop found a niche with student housing like the Chicago University Center, in HUD multifamily occupancies, and in internet sales around the world. Chase said they had worked with the Orange County Fire Authority to install CookStop units (see Appendix J).

Extremely popular with public safety organizations in general, Diment said the Safe-T-element was found to have been installed in 110,000 units worldwide, many of those being related to housing authorities and military institutions (see Appendix K). Diment also noted that there were a lot of grant opportunities available for public safety organizations to get assistance

with purchasing the Safe-T-element and that leveraging the energy savings component of his product was a good way to win approval (see Appendix K).

The fourth research question asked what laws, codes, and ordinances applied to the installation of the available engineering solutions. Jessell (see Appendix M) stated in the fire loss management questionnaire that any home cooking fire suppression system installed and maintained within the NFPD would be required to adhere to the applicable standard such as UL300 – Commercial Cooking Controls, UL300A – Extinguishing System Units for Residential Range Top Cooking Surfaces, UL1254 – The Testing Standard for Pre-Engineered Dry Chemical Extinguishing Units, NFPA 17 – Standard for Dry Chemical Extinguishing Systems, NFPA 17A – Standard for Wet Chemical Extinguishing Systems, or NFPA 96 – Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations (see Appendix M).

Additionally, Jessell wrote that the installed fire suppression systems would need to meet manufacturing requirements in accordance with CFC 901.4 and permitting requirements in accordance with CFC 901.2 (see Appendix M).

The requirements found in this research were much different for motion detecting systems and the contact burner temperature control system than for suppression systems according to Jessell (see Appendix M). Jessell wrote that the motion sensor systems and the Safe-T-element would need to be installed and maintained in accordance with California Plumbing Code or California Electrical Code (see Appendix M).

The final question posed in the research asked what the cost was of each of the identified engineering solutions per residential unit. The Guardian fire suppression system started at \$1,885 plus installation and options (see Appendix E) while the Denlar D1000 ranged between \$5,000 and \$6,000 plus installation for the high end model or between \$1,500 and \$2,000 plus

installation for the lower end model (see Appendix F). The StoveTop FireStop cost \$50 for a pair of canisters to cover four burners or \$70 if the stove has a microwave above (see appendix G).

The HSE HomeSenser was \$330 plus installation (see Appendix H), the Stove Guard was \$400 plus installation for the electric model and \$500 plus installation for the gas model (see Appendix I), and the CookStop was between \$359 and \$395 plus installation, depending on the model (see Appendix J). The Safe-T-element cost about \$175 for four burners and required installation (see Appendix K).

Discussion

The results of the researcher's procedures and the literature reviewed agreed that there were many engineering solutions available to mitigate cooking fires in non-sprinkled multifamily occupancies within the NFPD. The five research questions of the study were answered and viable engineering options were discovered which may be helpful in addressing America's most common fire cause: Cooking fires (Ahrens, 2012a).

A Vision 20/20 workshop (Vision, 2010) helped Dinaburg and Gottuk (2011) identify and categorize many existing cooking fire mitigation technologies which laid the groundwork for answering the first research question posed in this study; what are the available engineering solutions to mitigate residential cooking fires? Dinaburg and Gottuk (2011) categorized the existing products into five groups:

- 1. Home cooking fire suppression systems
 - (e.g., Guardian III, Denlar D1000, StoveTop FireStop)
- 2. Motion detectors to prevent unattended cooking
 - (e.g., HomeSenser, StoveGuard, Cookstop)

3. Contact burner temperature sensor and control

(e.g., Safe-T-element)

4. Over-range temperature sensor with burner control

(e.g., Innohome Stove Guard)

5. Smoke detection with burner control

(e.g., Fidepro)

The researcher found it important to note that the identified systems did not have to work in a vacuum as they were often more effective in combination. For instance, a motion sensing system may have been working well when a dish towel suddenly got too close to the heat source and caught fire. In that situation, a motion sensor to prevent unattended cooking and a suppression system to respond to the stovetop fire would have worked well together.

The first category Dinaburg and Gottuk (2011) identified dealt with suppression. While the extinguishment benefit an automatic home cooking fire suppression system was obvious, what the researcher determined was often ignored was that a major hazard still existed after the suppression agent had been discharged; usually the heat source was still activated.

The United States Fire Administration (Ahrens, et al., 2007) found that unattended cooking equipment was the leading factor in the cause of cooking fires, cooking fire related property damage, and cooking fire related death and injury. Ahrens, et al. (2007), theorized that if the behavior of leaving cooking unattended could be addressed, then the resulting fire could be prevented.

Given the studies of how prevalent inattention was in causing cooking fires, it made sense that Dinaburg and Gottuk's (2011) other four categories of engineering solutions all dealt with source control.

During the literature review, the products found to meet the last two categories, overrange temperature sensor with burner control (Innohome, 2013) and smoke detection with burner
control (Fidepro, 2013), were not yet available in the United States. The Innohome and Fidepro
products were not studied further as they did not meet the purpose of the research which centered
on solutions that could be implemented right away in the NFPD. No other commercially
available products were found during the research that could meet the intent of those last two
categories.

The researcher hypothesized that at least a few of the local San Francisco Bay Area fire protection installation companies would have some experience with residential cooking fire protection aside from dry chemical hand held fire extinguishers and traditional wet pipe fire sprinklers. Not one of the twenty private fire protection systems installation companies (see Appendix D) which the researcher contacted could provide any information or experience with engineering solutions for residential cooking fires in non-sprinkled homes.

Although the intent of the twenty phone calls (see Appendix D) was to gather information about specific engineering solutions, the industry's apparent lack of any knowledge or experience of alternative solutions was very telling in an altogether different way. An apparent disparity existed within the local market of protecting homes with automatic cooking fire prevention systems which could prevent nearly 40% of the home structure fires in Novato alone (see Appendix A).

Of the three categories of products listed by Dinaburg and Gottuk (2011) which the literature research determined were available in the United States (Guardian, 2013; Denlar, 2013; StoveTop, 2013; Eisinger, 2013; Stove Guard, 2013; Cookstop, 2013; Pioneering, 2013), seven solutions were identified. Documented interviews with representatives from each of the seven

companies (see Appendices E, F, G, H, I, J, and K) confirmed that the products were indeed available for purchase and could meet the intent of this research.

The interviews with the product representatives were in alignment with the literature available regarding the installation of the available engineering solutions, addressing the second research question.

In the home cooking fire suppression category, Pagan (see Appendix E) was very specific in her description of the need for a certain type of cabinetry and hood system in order for the Guardian to be installed correctly and this was echoed in the literature (Guardian, 2013). Provided the cabinetry and hood are appropriate, the installation, according to Pagan (see Appendix E) and per the website (Guardian, 2013), was to take under an hour and may or may not require an electrician to assist, depending on the installer's experience level.

Another suppression system, the Denlar D1000, was said by Decataldo (see Appendix F) and confirmed by the literature (Denlar, 2013) to be as simple as installing any other hood, because the unit arrives fully integrated with all of the fire protection parts preinstalled.

Installing a hood system may be out of the realm of most homeowners, but Decataldo said (see Appendix F) that usually any HVAC technician or contractor could handle it without issue.

The simplest installation of all the engineering solutions researched was found to be the StoveTop FireStop. Harris (see Appendix G) said that the typical hood just required that the installer attach two magnetic dry chemical canisters to the underside of that hood and the installation is complete. The StopTop FireStop literature (StoveTop, 2013) contained the same information as Harris (see Appendix G) relayed about installing the product under hoods or under microwaves.

Installation of the motion sensing technologies created to prevent unattended cooking tended to be fairly simple. Review of the HomeSenser operation manual (Eisinger, 2013) showed the unit could be hardwired into an electric range fairly easily by an electrician or very competent home owner. Eisinger (see Appendix H) only provided a hardwired version of the HomeSenser and bills the feature as an integral safety feature because it could not be easily disconnected.

The other two motion sensing products evaluated in this research, the Stove Guard and the CookStop, both offered options for electric ranges to be simply plugged into the electrical shut off component of the system (Stove Guard, 2013; CookStop, 2013). The ease of installation of the Stove Guard and CookStop were confirmed with the product representatives (see Appendices H and I).

The appearance and operation of the motion sensing and programming component of the HomeSenser was different than the Stove Guard and CookStop (Eisinger, 2013; Stove Guard, 2013; CookStop, 2013). The remote sensor on the HomeSenser was found to be much smaller and more discrete than the other products because it did not have a display with programming buttons (Eisinger, 2013; Stove Guard, 2013; CookStop, 2013). The drawback, of course, to the lack of programming buttons was that the HomeSenser (Eisinger, 2013) had only one setting, which was essentially a six minute countdown of inactivity.

The Stove Guard (2013) remote sensor offered an "auto" mode which could be set for one to forty minutes or a "timer" mode which disabled the motion sensor and allowed the stove to be on for up to ninety-nine minutes. The CookStop (2013) had the most set up options offering programmable periods of inactivity, temporary overrides of the auto timer, complete lockout of the stove operation at preset times of the day, and many other administrative

functions. Chase (see Appendix J) said that people enjoyed the additional installation settings, like schools who could program the stove to be non-operational from midnight to 7:00am.

The Safe-T-element had a very involved installation process which was found by the literature (Pioneering, 2013) and the product representative (see Appendix K) to best be handled by an installation professional or the appliance manufacturer. The great benefits found by such a complicated installation were that the Safe-T-element was nearly impossible to uninstall and it required no programming because it was always working (Pioneering, 2013).

The third question in this research asked about the experiences public safety organizations had with the available engineering solutions which ranged from very little interaction to a great deal of cooperation. The researcher intended to look not just to the relationship of these fire prevention products to fire departments, but to all stakeholders with a vested interest in keeping the public safe.

The Guardian fire suppression system was said by Rouse (2012) to have specialized in the protection of residential stoves in public assembly areas where fire protection was required by the local AHJ. Marshall (see Appendix L) said that in one such area in California, acting as the AHJ, he approved installation of three hundred Guardian units in a sprinkled senior apartment complex with a propensity for cooking fires to try to minimize water damage from the wet pipe sprinkler activations. Pagan (see Appendix E) also mentioned that the Guardian has been used in many military applications all over the world as well as assisted living facilities, fire stations, universities, and churches. The Guardian literature (Guardian, 2013) categorized their focus on residential, multi-family, senior living, and schools/daycares.

Decataldo (see Appendix F) said that HUD housing authorities and healthcare were a large part of Denlar's business. Denlar (2013) went so far as to create their own detailed report

which specifically attempted to help public safety organizations approve the Denlar fire suppression system. Denlar (2013) was found frequently to refer to one of their areas of focus as "not for profit" cooking, meaning occupancies that were not residential, but used a residential range such as churches, fire houses, and managed care facilities.

The product that had a lot of direct interaction with fire departments specifically was the StoveTop FireStop. The contact information on eighteen fire departments who received grant money for StoveTop FireStops to be purchased for their community was found on the StoveTop FireStop website (*StoveTop*, 2013). Additionally, three recent EFO papers were found to have recommended StoveTop FireStop canisters to help mitigate loss from residential cooking fires in their protection areas (Cannaday, 2012; Farmer, 2012; Olson, 2007). Stangeland (see Appendix L) said the StoveTop FireStop was recommended by his fire department to some of their senior living facilities. With forty years of military partnerships and thousands of units installed by housing authorities all over the United States, Harris (see Appendix G) confirmed that StoveTop FireStop had worked with many public safety organizations.

Another product very familiar to housing authorities and other public organizations, especially in the state of Ohio, was the HomeSenser, which was actually created with the help of the Akron Metropolitan Housing Authority (Eisinger, 2013). Having worked with mental health organizations, the visual and audible impaired, fire departments, colleges, and churches, Eisinger (see Appendix H) said she had many interactions with public safety organizations.

Fire prevention specialists helped to upgrade the Stove Guard in 2010 (Stove Guard, 2013), but the company had yet to fully partner with any public safety organizations on installation of their product on a large scale per Uhrich (see Appendix I). The Stove Guard had

been installed in multi-family residences and in many homes of people with special needs (Stove Guard, 2013).

Originally designed for seniors (Cookstop, 2013), the CookStop had partnered with the Orange County Fire Authority (see Appendix J), among others, to broaden their reach to include many different subcategories of residential housing. According to Chase, one large project which CookStop protected was the Chicago University Center (see Appendix J).

Safe-T-element was invited to a Vision 20/20 workshop of kitchen fire prevention technologies by the Department of Homeland Security, State Farm Insurance, and the Institute of Fire Engineers US Branch (Vision, 2010), and has partnered with multiple different public organizations including HUD, universities, and special needs housing facilities (Pioneering, 2013). Two of the thirty fire department representatives who responded to the Residential Cooking Fire Mitigation Survey (see Appendix L) were exploring element temperature control technology. Diment (see Appendix K) spoke in his interview of many grant opportunities available for public safety organizations to bring to their communities. Pioneering (see Appendix K) had just recently helped the Denver Housing Authority to install Safe-T-element in all of their stoves to prevent fire and also to reduce energy consumption by 50%.

Finding out what laws, codes, and ordinances applied to the installation of the available engineering solutions in this study was the fourth research question. The independent literary research performed found that the NFPD adopted the CFC and there was language in CFC 901.4.2 pursuant to non-required fire protection systems (California, 2013) which applied to the fire suppression category of the identified solutions.

For the NFPD, Jessell (see Appendix M) confirmed that any installed and maintained suppression system would be required to adhere to the applicable standards. The suppression

systems would also need to meet CFC 901.4 manufacturing requirements and CFC 901.2 permitting requirements, said Jessell (see Appendix M).

Marshall (see Appendix L) agreed with Jessell (see Appendix M) in that he referenced UL300A and the CFC when allowing a senior apartment complex to install the Guardian suppression system in Contra Costa County, California. As stated by Pagan (see Appendix E), the Guardian is approved in UL300A for use on a residential stove. Decataldo (see Appendix F) stated the Denlar D1000 is also UL300A compliant, International Code Council compliant, and has an option for NFPA101 (Life Safety Code) compliance.

The StoveTop FireStop was found to not be UL listed, but the system had been certified to some sections of UL1254 (Pre-Engineered Dry Chemical Extinguishing System Units) and some sections of UL300 (StoveTop, 2013). StoveTop FireStop was also tested by the National Institute of Standards and Technology (NIST) and Wyle Laboratories, which was determined to be a Nationally Recognized Testing Laboratory (StoveTop, 2013). The StoveTop FireStop website stated the unique nature of their product did not fit into any existing UL categories, so they were trying to create a new UL standard which would apply (StoveTop, 2013). According to Harris, the StoveTop FireStop had actually been written into some local ordinances as being required in certain occupancies (see Appendix G).

Where the fire suppression systems were heavily regulated in the fire code, the other fire prevention engineering solutions were not referred to at all, according to Jessell (see Appendix M). In the questionnaire completed by Jessell (see Appendix M), she noted that the motion sensing technologies and the contact burner temperature control system would be regulated by the California Plumbing Code or the California Electrical Code.

Motion detecting fire prevention system HomeSenser was found to be certified by the Canadian Standards Association (CSA), which is a not-for-profit North American standards organization (Eisinger, 2013). Another of the motion sensor systems, Stove Guard, conforms to UL 464 (Audible Signal Appliances) and CSA C22.1 No. 205 (Stove Guard, 2013). The third motion sensing system in this study, the CookStop, was said by Chase (see Appendix J) and confirmed by the literature (CookStop, 2013) to be UL and CSA approved as a safety device.

The Safe-T-element was discovered to be certified by CSA International to UL858 (Household Electric Ranges) and CSA standard CC22.2 No. 61-08 (Pioneering, 2013). Also, Diment (see Appendix K) stated that the Safe-T-element had been written into many codes and ordinances to be required in certain occupancies.

The final research question answered in this discussion referred to the estimated cost per residential unit of each of the indentified engineering solutions to mitigate cooking fires in multifamily residences. A culmination of the cost data found in the literature research (Guardian, 2013; Denlar, 2013; StoveTop, 2013; Eisinger, 2013; Stove Guard, 2013; CookStop, 2013; Pioneering, 2013) and procedure results (see Appendices E, F, G, H, I, J, and K) can be found on Table 4.

Table 4

Cooking Fire Mitigation Engineering Solution Costs

System	MSRP	Professional Installation Needed	Options
Guardian III	\$1,885 – electric \$2,200 – gas	Maybe	Hardwire save \$45, AC/DC \$35, pull station \$275, alarm interconnect \$185, alarm/strobe \$340, recharge kit \$95
Denlar D1000 Denlar DS	\$5,000 to \$6,000 \$1,500 to \$2,000	Yes	Included in MSRP
StoveTop FireStop	\$50 – Rangehood \$85 – Microhood	No	No
HSE HomeSenser	\$330	Maybe	No
Stove Guard	\$400 – electric \$500 – gas	Maybe	Hardwired version for electric cooktop
CookStop	\$359 – plug in electric \$395 – hardwired electric	Maybe	7 models depending on wiring needs
Safe-T-element	\$225	Yes	Can be installed at certain appliance manufacturers

Recommendations

Based on the results of this descriptive research using the five research questions, the researcher found that the intent of the study was met successfully in that seven sound engineering solutions were identified which could be used to mitigate cooking fires in non-sprinkled multifamily occupancies within the NFPD.

The researcher had theorized that at the conclusion of this study, there would be one product which was clearly the answer to drastically reducing the cooking fire problem in Novato, California. The information in this study proved to the researcher that each product identified had its own benefits, was appropriate in its own designed application, and afforded protection at its own different price point.

Below are the short-term recommendations for the NFPD:

- 1. The researcher should discuss the findings of the study in detail with Fire Marshal Bill Tyler and Deputy Fire Marshal Lori Jessell to seek their expert opinions on how to proceed with implementing an engineering solution to mitigate cooking fires in the non-sprinkled multifamily occupancies within the NFPD. There exists an opportunity to recommend different products to different groups. For example, recommending \$50 StoveTop FireStops to private paying building owners and \$225 Safe-T-elements to grant funded HUD retrofits.
- 2. With the approval of Fire Chief Mark Heine, the researcher should meet with the NFPD grant writing team leader, Battalion Chief Gerald McCarthy, to seek assistance in locating grant funding available for the installation of one or more of the identified engineering solutions. This initial grant search would be for information to help in the decision of what product or products for which to seek funding. Special consideration should be given to the Safe-T-element because of the energy saving component which complements the fire safety component well. Also of note from the research, the StoveTop FireStop, the CookStop, and the Safe-T-element had recent history of helping fire departments secure grant funding to acquire their products.
- 3. The researcher and/or an appropriate member of the Fire Loss Management Division of the NFPD should meet with a representative from the San Francisco Multifamily Hub, which has HUD jurisdiction in Novato, to discuss a partnership in providing engineering solutions to mitigate cooking fires in Novato non-sprinkled multifamily HUD housing.

Below are the long-term recommendations for the NFPD:

1. Based on the outcomes of the short-term recommendations above, the researcher should develop a comprehensive implementation plan of the selected engineering solution(s).

- 2. The implementation plan should include SMART goals (Specific, Measurable, Action oriented, Realistic, Time based), identified outcomes, detailed strategies to obtain the goals, an effectiveness evaluation method, and triggers for reassessment of the plan.
- 3. Special attention should be paid to identifying any and all potential costs to the NFPD, as those costs will need to be budgeted by Fire Loss Management, approved by the Fire Chief, and ultimately permitted by the NFPD Board of Directors.
- 4. Submit the final copy of this research paper to the Information Technology department of the NFPD so that the research can be posted on the District website with the other EFO papers under the interagency tab. For peers reviewing this information, please note that the research was only accurate up to the end of 2013 and there are exciting new fire safety technologies constantly being developed.

References

- Ahrens, M. (2012a). *Home structure fires* (NFPA Report "Home Structure Fire's"). Retrieved from the National Fire Protection Agency website: http://www.nfpa.org/research/reports-and-statistics/fires-by-property-type/residential/home-structure-fires
- Ahrens, M. (2012b). *Home fires involving cooking equipment* (NFPA Report "Home Fires Involving Cooking Equipment). Retrieved from the National Fire Protection Agency website: http://www.nfpa.org/research/reports-and-statistics/fire-causes/appliances-and-equipment/cooking-equipment
- Ahrens, M., Hall, J., Comoletti, J., Gamache, S., & LeBeau, A. U.S. Department of Homeland Security, Federal Emergency Management Agency. (2007). *Behavioral mitigation of cooking fires* (FA-312). Retrieved from U.S. Fire Administration website:

 http://www.usfa.fema.gov/fireservice/prevention_education/strategies/cooking/
- California fire code 2013. (2013). Retrieved from California Building Standards Commission website:

http://www.ecodes.biz/ecodes_support/Free_Resources/2013California/13Fire/13Fire_main.html

Cannaday, D. (2012). Fire risk reduction in Allen's multifamily dwellings without fire sprinkler protection (Report No. 47104). Emmitsburg, MD: Author

CookStop. (2013). Retrieved from http://www.cookstop.com/home.html

Denlar Fire Protection. (2013). Retrieved from http://www.denlarhoods.com/

- Diekman, S., Ballesteros, M. F., & Ahrens, M. (2010). Home fires in America: Progress and opportunities. *American Journal of Lifestyle Medicine*, 6(2), 141-146. doi: 10.1177/1559827611402602
- Dinaburg, J.& Gottuk, D. (2011). *Home cooking fire mitigation: technology assessment* (Fire Protection Research Foundation). Retrieved from the National Fire Protection Agency website: http://www.nfpa.org/research/fire-protection-research-foundation/reports-and-proceedings/other-research-topics/home-cooking-fire-mitigation
- Duffy, S. (2009). [Web log message]. Retrieved from http://www.denlarhoods.com/about-us/latest-news/item/14-denlar-fire-safety-system
- Eisinger, D. (2013). *Homesenser electric stove senser: Hse uniwire*. Retrieved from http://www.homesensers.com/products.html

Farmer, A. (2012). Stove top fire suppression (Report No. 46958). Emmitsburg, MD: Author

Fidepro Oy Ltd. (2013). Retrieved from http://www.fidepro.com/en/

Guardian safety solutions, Inc. (2013). Retrieved from http://guardianssi.com/

Innohome Ltd. (2013). Retrieved from http://www.innohome.info/home

- Integrated Fire & Life Safety Solutions. (2013). *Guardian iii* (*g300b*) *price quote*. Retrieved from http://www.iflss.net/BuyG300B.htm
- Little, A. U.S. Consumer Product Safety Commission, (2001). *Technical, practical, and*manufacturing feasibility of technologies to address surface cooking fires (Reference 72931). Cambridge, MA: Arthur D. Little, Inc.

- Madrzykowski, D., Hamins, A., & Mehta, S. U.S. Commerce Department, (2007). *Residential kitchen fire suppression research needs: Workshop proceedings* (NIST Special Publication 1066). Retrieved from National Institute of Standards and Technology (NIST) website: http://fire.nist.gov/bfrlpubs/fire07/art079.html
- Marketwatch.com. (2013). Pioneering technology teams with siemens on installation of life & energy saving safe-t-elements for nashville mdha. Retrieved from http://www.marketwatch.com/story/pioneering-technology-teams-with-siemens-on-installation-of-life-energy-saving-safe-t-elements-for-nashville-mdha-2013-09-25
- Moretti, C. (2009). *Home fire safety: preventive measures and issues*. New York: Nova Science Publishers, Inc.
- Novato Fire Protection District. (2013). *Ordinance Number 2013*. Retrieved from the Novato Fire Protection District website: http://www.novatofire.org/index.aspx?page=166
- Novato Fire Protection District. (2010). *Ordinance Number 2010-2*. Retrieved from the Novato Fire Protection District website: http://www.novatofire.org/index.aspx?page=166
- Novato Fire Protection District. (2009a). *Novato Fire Protection District 2009 all risk standards* of cover. Novato, CA: Author.
- Novato Fire Protection District. (2009b). *Novato Fire Protection District 2009/2013 strategic plan*. Novato, CA: Author.
- Novato Fire Protection District. (2005). *Standard 401 Fire Sprinkler Systems*. Retrieved from the Novato Fire Protection District website:

 http://www.novatofire.org/index.aspx?page=179

- Novato Fire Protection District. (1988). *Ordinance Number 88-1*. Retrieved from the Novato Fire Protection District website: http://www.novatofire.org/index.aspx?page=166
- Office of the Ontario Fire Marshall, (2009). *Reducing residential stovetop fires in Ontario*.

 Retrieved from the Ontario ministry of community safety & correctional services website:

http://www.mcscs.jus.gov.on.ca/stellent/groups/public/@mcscs/@www/@ofm/document s/webasset/ec164669.pdf

Olson, D. (2007). Protection systems selection and implementation strategies for residential stove top fires for South Kitsap Fire and Rescue (Report No. 40937). Emmitsburg, MD: Author

Pioneering Technology Corp. (2013). *Safe-t-element*. Retrieved from http://www.pioneeringtech.com/safe-t-element

Rouse, P. (2012, September 10). [Web log message]. Retrieved from http://guardianssi.com/safer-better-fire-protection-for-texas-public-assembly-locations/

Stove Guard International Ltd. (2013). Retrieved from http://www.stoveguardintl.com/

StoveTop FireStop. (2013). Retrieved from http://www.stovetopfirestop.com/

Three youths rescued from burning Novato apartment. (2013). *Marin Independent Journal*.

Retrieved from http://www.marinij.com/ci_22511138/3-youths-rescued-from-burning-novato-apartment

Uhrich, D. (2008, November 30). [Web log message]. Retrieved from http://www.stoveguardintl.com/About/PressReleases.html Underwriters Laboratories. (2013). UL300a. Retrieved from UL website:

http://www.ul.com/global/eng/pages/solutions/standards/accessstandards/catalogofstandards/standard/?id=300A_3

United States Fire Administration. (2010a). *America's fire and emergency services leader:*Strategic plan fiscal years 2010-2014. Retrieved from United States Fire Administration website: http://www.usfa.fema.gov/downloads/pdf/strategic_plan.pdf

United States Fire Administration. (2010b). Executive fire officer program: Celebrating 25 years of excellence in fire/emergency services executive education, 1985-2010. Retrieved from United States Fire Administration website:

http://www.usfa.fema.gov/nfa/efop/index.shtm

Vision 20/20, (2010). *Kitchen fire prevention technologies workshop report, November 2010*.

Retrieved from website: http://strategicfire.org/page.cfm/go/Reports-1

Appendix A

NFPD Structure Fire Data 2009 - 2013

								1		1	
								NFPD			
		Date of	Time of Incident					Response			
Study#	Incident#	Incident	Dispatch	Year	Month	weekday	Hour	Zone	Incident Type	Room of origin	Cause
1	13-3884	10/15/13	18:36:51	2013	10	3	18	5	Cooking Fire	Kitchen	Plastic in oven
2	13-3702	09/30/13	20:24:20	2013	9	2	20	1	Cooking Fire	Kitchen	Grease in oven
3	13-3323	09/03/13	21:14:36	2013	9	3	21	5	Building Fire	Exterior/attached	Heat from powered equip
4	13-3132	08/21/13	17:51:39	2013	8	4	17	4	Cooking Fire	Kitchen	Unattending cooking
5	13-2739	07/23/13	10:01:30	2013	7	3	10	1	Building Fire	Kitchen	Unk - Kitchen origin
6	13-2549	07/09/13	22:22:54	2013	7	3	22	1	Cooking Fire	Kitchen	Unattended cooking
7	13-2065	06/04/13	13:15:04	2013	6	3	13	3	Cooking Fire	Kitchen	Unattended cooking
8	13-1793	05/14/13	14:53:28	2013	5	3	14	3	Cooking Fire	Kitchen	Unattended cooking
9	13-1754	05/11/13	17:41:43	2013	5	7	17	1	Cooking Fire	Kitchen	Dog turned on burner
10	13-1733	05/09/13	20:34:24	2013	5	5	20	5	Cooking Fire	Kitchen	Unattended cooking
11	13-1596	04/30/13	16:34:27	2013	4	3	16	5	Cooking Fire	Kitchen	Plastic in oven
12	13-1393	04/13/13	20:23:56	2013	4	7	20	2	Cooking Fire	Kitchen	Unattended cooking
13	13-1159	03/27/13	14:24:13	2013	3	4	14	1	Cooking Fire	Kitchen	Unattended cooking
14	13-1104	03/22/13	17:32:08	2013	3	6	17	3	Fire, other	Garage	Intentional - garage
15	13-1087	03/21/13	10:51:43	2013	3	5	10	4	Cooking Fire	Kitchen	Creasote fire in flue
16	13-965	03/11/13	23:23:00	2013	3	2	23	1	Building Fire	Basement	Electrical
17	13-889	03/06/13	10:59:28	2013	3	4	10	1	Building Fire	Bathroom	Plumber soldering copper
18	13-849	03/03/13	21:05:49	2013	3	1	21	5	Cooking Fire	Kitchen	Grease fire in flue
19	13-601	02/13/13	12:43:21	2013	2	4	12	1	Building Fire	Laundry	Dryer fire
20	13-547	02/08/13	18:59:46	2013	2	6	18	3	Chimney Fire	Living	Creasote fire in flue
21	13-529	02/07/13	21:56:03	2013	2	5	21	1	Building Fire	Living	Improper disposal of cigarette
22	13-505	02/05/13	20:23:17	2013	2	3	20	1	Chimney Fire	Living	Creasote fire in flue
23	13-468	02/02/13	17:26:07	2013	2	7	17	5	Cooking Fire	Kitchen	Unattended cooking
24	13-403	01/29/13	17:06:35	2013	1	3	17	1	Cooking Fire	Kitchen	Grease on stovetop
25	13-163	01/13/13	17:25:44	2013	1	1	17	1	Fire, other	Laundry	Dryer fire
26	13-126	01/10/13	15:13:54	2013	11	5	15	1	Fire, other	Kitchen	Improper disposal of cigarette
27	12-4920	12/19/12	12:49:54	2012	12	4	12	3	Chimney Fire	Living	Improper fire box installation
28	12-4910	12/18/12	18:42:59	2012	12	3	18	4	Cooking Fire	Kitchen	Unattended cooking
29	12-4804	12/10/12	10:53:11	2012	12	2	10	3	Building Fire	Living	Unattended candle
30	12-4594	11/28/12	14:33:05	2012	11	4	14	1	Building Fire	Attic	Conducted heat from fixture
31	12-4497	11/20/12	18:23:08	2012	11	3	18	3	Building Fire	Roof	Electrical
32	12-4376	11/10/12	21:12:07	2012	11	7	21	3	Building Fire	Living	Improper fire box installation
33	12-4340	11/08/12	10:29:08	2012	11	5	10	4	Fire, other	Laundry	Dryer fire, oily rags
34	12-4291	11/05/12	11:15:08	2012	11	2	11	3	Cooking Fire	Kitchen	Storage in oven caught fire
35	12-4251	11/03/12	11:24:40	2012	11	7	11	4	Building Fire	Roof	Torch from roof workers
36	12-3981	10/14/12	17:06:29	2012	10	1	17	1	Cooking Fire	Kitchen	Unattended cooking, oil
37	12-3689	09/22/12	20:35:57	2012	9	77	20	3	Building Fire	Closet	Heat from mechanical equip
38	12-3646	09/19/12	18:35:32	2012	9	4	18	3	Building Fire	Laundry	Dryer fire, paper
39	12-3195	08/18/12	15:28:33	2012	8	7	15	5	Building Fire	Bedroom	Candle
40	12-3020	08/05/12	22:12:00	2012	8	1	22	2	Building Fire	Exterior/attached	Improper disposal of cigarette
41	12-2689	07/12/12	9:44:15	2012	7	5	9	3	Building Fire	Exterior/attached	\
42	12-2538	07/01/12	9:46:19	2012	7	1	9	4	Cooking Fire	Kitchen	Unattended cooking
43	12-2440	06/25/12	11:10:53	2012	6	2	11	4	Building Fire	Kitchen	Unattended cooking, oil
44	12-2318	06/17/12	18:24:29	2012	6	11	18	5	Cooking Fire	Kitchen	Toys in oven caught fire
45	12-1961	05/25/12	15:51:20	2012	5	6	15	1	Building Fire	Exterior/attached	Improper disposal of cigarette
46	12-1615	04/28/12	20:17:16	2012	4	7	20	3	Cooking Fire	Exterior/attached	BBQ too close to house
47	12-1521	04/22/12	17:52:48	2012	4	1	17	2	Cooking Fire	Kitchen	Burnt food in microwave
48	12-1519	04/22/12	15:25:59	2012	4	1	15	5	Fire, other	Kitchen	oven fire while self cleaning
49	12-1377	04/12/12	21:28:50	2012	4	5	21	4	Cooking Fire	Kitchen	Unattended cooking
50	12-1150	03/25/12	15:55:46	2012	3	1	15	1	Cooking Fire	Kitchen	Grease fire

					ı	ı		1			
								NFPD			
		Date of	Time of Incident					Response			
Study#	Incident#	Incident	Dispatch	Year	Month	weekday	Hour	Zone	Incident Type	Room of origin	Cause
51	12-1006	03/16/12	17:49:13	2012	3	6	17	3	Cooking Fire	Kitchen	oven fire, plastic mousetrap
52	12-1001	03/15/12	14:00:00	2012	3	5	14	5	Building Fire	Bathroom	arson, juveniles
53	12-805	03/01/12	1:34:05	2012	3	5	1	1	Building Fire	Bedroom	Unattended candle
54	12-709	02/23/12	23:54:12	2012	2	5	23	4	Building Fire	Living	Object too close to fireplace
55	12-636	02/18/12	10:42:26	2012	2	7	10	3	Chimney Fire	Living	Creasote fire in flue
56	12-590	02/14/12	11:18:06	2012	2	3	11	1	Cooking Fire	Kitchen	Build up of grease in oven
57	12-564	02/11/12	8:18:11	2012	2	7	8	1	Building Fire	Garage	Electrical
58	12-335	01/22/12	14:01:00	2012	1	1	14	3	Cooking Fire	Kitchen	Unattended cooking, oil
59	12-120	01/09/12	13:45:10	2012	1	2	13	4	Building Fire	Laundry	Dryer fire
60	11-4706	12/22/11	23:35:14	2011	12	55	23	4	Building Fire	Living	Unattended candle
61	11-4530	12/11/11	10:36:41	2011	12	1	10	4	Cooking Fire	Kitchen	Robe caught fire while cooking
62	11-4373	11/27/11	17:23:56	2011	11	1	17	1	Cooking Fire	Kitchen	Grease in oven
63	11-4337	11/24/11	14:14:37	2011	11	55	14	4	Cooking Fire	Kitchen	Grease in oven
64	11-3501	09/24/11	11:11:14	2011	9	7	11	1	Building Fire	Kitchen	Paper too close to heat source
65	11-3454	09/20/11	14:04:01	2011	9	3	14	2	Building Fire	Exterior/attached	Electrical
66	11-3324	09/12/11	18:56:08	2011	9	2	18	3	Cooking Fire	Kitchen	Grease in oven
67	11-3293	09/10/11	16:20:35	2011	9	7	16	4	Cooking Fire	Kitchen	Unattended cooking
68	11-3164	09/02/11	11:53:04	2011	9	6	11	2	Building Fire	Laundry	Dryer fire
69	11-2964	08/16/11	8:05:10	2011	8	3	8	4	Building Fire	Attic	Electrical - nail into 220V
70	11-2927	08/13/11	12:18:58	2011	8	7	12	4	Building Fire	Living	Electrical - overload ext cord
71	11-2784	08/01/11	12:02:23	2011	8	2	12	3	Building Fire	Living	Unattended candle
72	11-2753	07/29/11	17:06:30	2011	7	6	17	5	Building Fire	Kitchen	Electrical - malfunction in hood
73	11-2424	07/04/11	15:07:28	2011	7	2	15	1	Cooking Fire	Kitchen	Grease in oven
74	11-2327	06/28/11	11:10:00	2011	6	3	11	1	Building Fire	Garage	Soldering copper / gas leak
75	11-2274	06/24/11	23:03:19	2011	6	6	23	3	Building Fire	Exterior/attached	Oily rags - deck stain
76 	11-2222	06/21/11	10:11:26	2011	6	3	10	1	Building Fire	Closet	Electrical - HVAC fan motor
77	11-2039	06/11/11	1:30:37	2011	6	7	1 16	1	Cooking Fire	Kitchen Kitchen	Unattended cooking Unattended cooking
78	11-1635	05/10/11	16:16:57	2011	5	3	16	1	Cooking Fire Fire, other	Exterior/attached	Improper disposal of ashes
79 80	11-1590	05/07/11	16:03:16		5	7	<u> </u>	3		<u> </u>	
81	11-1582 11-1536	05/07/11 05/04/11	11:08:04	2011 2011	5	7	11 6	1	Fire, other Building Fire	Outbuilding Closet	Improper disposal of cigarette Furnace malfunction
82			6:33:53		5	4	 	3	ļ	Kitchen	Unattended cooking
83	11-1505 11-1504	05/01/11 05/01/11	14:14:31 14:10:47	2011	5	1	14 14	3	Cooking Fire Building Fire	Exterior/attached	Oilyrags
84	11-1363	04/20/11	12:46:34	2011	5 4	4	12	3 1	Building Fire	Exterior/attached	Electrical
85	11-1295	04/20/11	19:37:22	2011	4	5	19	1	Cooking Fire	Kitchen	Unattended cooking
86	11-1006	03/24/11	16:54:55	2011	3	5	16	5	Cooking Fire	Kitchen	Grease under burner
87	11-604	02/19/11	17:08:33	2011	2	7	17	4	Cooking Fire	Kitchen	Malfunction in microwave
88	11-566	02/16/11	19:36:11	2011	2	4	19	5	Building Fire	Kitchen	Toddler turned on burner
89	11-413	02/04/11	0:15:43	2011	2	6	0	4	Building Fire	Exterior/attached	Improper disposal of cigarette
90	11-183	01/14/11	21:40:16	2011	1	6	21	1	Cooking Fire	Kitchen	Unattended cooking
91	11-70	01/05/11	20:15:43	2011	1	4	20	4	Chimney Fire	Living	Creosote fire in flue
92	10-4945	12/26/10	10:53:03	2010	12	1	10	1	Cooking Fire	Kitchen	Curtains too close to stove
93	10-4880	12/22/10	8:33:34	2010	12	4	8	3	Building Fire	Exterior/attached	Electrical malfunction - outlet
94	10-4871	12/21/10	18:33:50	2010	12	3	18	3	Building Fire	Kitchen	Electrical malfunction - outlet
95	10-4842	12/19/10	0:47:39	2010	12	1	0	4	Building Fire	Exterior/attached	Unattended candles
96	10-4495	11/21/10	14:10:55	2010	11	1	14	4	Cooking Fire	Kitchen	Unattended cooking - toaster
97	10-4494	11/21/10	13:32:21	2010	11	1	13	3	Building Fire	Living	Poor construction of f/p flue
98	10-4440	11/16/10	20:42:05	2010	11	3	20	4	Building Fire		Unattended candle
99	10-4202	10/29/10	10:41:31	2010	10	6	10	3	Fire, other	Closet	Electrical - light fixture
100	10-4140	10/24/10	18:05:08	2010	10	1	18	4	Cooking Fire	Kitchen	Unattended cooking - broiler

								NFPD			
		Date of	Time of Incident					Response			
Study#	Incident#	Incident	Dispatch	Year	Month	weekday	Hour	Zone	Incident Type	Room of origin	Cause
101	10-4044	10/17/10	14:55:08	2010	10	1	14	5	Cooking Fire	Kitchen	Unattended cooking
102	10-3999	10/14/10	3:48:25	2010	10	5	3	4	Building Fire	Exterior/attached	Undetermined
103	10-3798	09/29/10	19:25:11	2010	9	4	19	2	Building Fire	Kitchen	Electrical - outlet
104	10-3461	09/02/10	3:34:12	2010	9	5	3	3	Building Fire	Exterior/attached	Electrical - light fixture
105	10-2982	07/28/10	15:11:14	2010	7	4	15	5	Cooking Fire	Kitchen	grease in oven
106	10-2941	07/25/10	10:35:37	2010	7	1	10	2	Cooking Fire	Kitchen	fire in toaster
107	10-2668	07/03/10	20:51:19	2010	7	7	20	3	Cooking Fire	Kitchen	grease in oven
108	10-2628	06/30/10	15:39:33	2010	6	4	15	4	Cooking Fire	Kitchen	Unattended cooking
109	10-2529	06/23/10	12:50:22	2010	6	4	12	1	Cooking Fire	Kitchen	Unattended cooking
110	10-2224	06/06/10	6:47:20	2010	6	1	6	2	Building Fire	Basement	Electrical - illegal power tap
111	10-2029	05/22/10	20:39:31	2010	5	7	20	4	Chimney Fire	Living	Creosote fire in flue
112	10-1627	04/24/10	8:33:39	2010	4	7	8	3	Building Fire	Living	Glass magnified sunlight
113	10-1240	03/27/10	18:10:13	2010	3	7	18	2	Building Fire	Garage	Charging auto battery
114	10-1204	03/25/10	13:37:38	2010	3	5	13	2	Building Fire	Living	Electrical
115	10-997	03/11/10	8:34:14	2010	3	5	8	1	Building Fire	Exterior/attached	Electrical
116	10-842	02/27/10	21:07:57	2010	2	7	21	2	Building Fire	Garage	Electrical
117	10-626	02/12/10	15:58:50	2010	2	6	15	5	Building Fire	Bedroom	Improper disposal of cigarette
118	10-412	01/29/10	14:56:56	2010	1	6	14	5	Building Fire	Kitchen	Electrical
119	10-245	01/19/10	7:31:03	2010	1	3	7	1	Building Fire	Kitchen	Unattended candle
120	10-109	01/09/10	10:43:59	2010	1	7	10	5	Building Fire	Bathroom	Unattended candle
121	09-5129	12/27/09	19:16:52	2009	12	1	19	3	Building Fire	Garage	Charging auto battery
122	09-5120	12/26/09	20:33:19	2009	12	7	20	3	Chimney Fire	Living	Creosote fire in flue
123	09-5104	12/25/09	14:14:06	2009	12	6	14	5	Cooking Fire	Kitchen	Unattended cooking
124	09-5053	12/21/09	18:24:07	2009	12	2	18	4	Cooking Fire	Kitchen	Unattended cooking
125	09-5047	12/21/09	0:52:38	2009	12	2	0	3	Building Fire	Garage	Unattended candle
126	09-5041	12/20/09	16:22:22	2009	12	1	16	2	Building Fire	Living	Improper storage of ashes
127	09-4970	12/16/09	6:52:50	2009	12	4	6	3	Building Fire	Exterior/attached	Furnace malfunction
128	09-4963	12/15/09	20:03:00	2009	12	3	20	1	Cooking Fire	Kitchen	Grease in oven
129	09-4909	12/11/09	14:15:44	2009	12	6	14	1	Building Fire	Roof	Electrical
130	09-4877	12/09/09	21:23:19	2009	12	4	21	1	Building Fire	Kitchen	Electrical
131	09-4661	11/24/09	15:33:00	2009	11	3	15	1	Building Fire	Bedroom	Children playing w matches
132	09-4657	11/24/09	12:16:29	2009	11	3	12	3	Building Fire	Laundry	Dryer malfunction
133	09-4486	11/11/09	14:16:04	2009	11	4	14	1	Cooking Fire	Kitchen	Unattended cooking
134	09-3826	09/26/09	17:27:22	2009	9	7	17	5	Cooking Fire	Kitchen	Grease in oven
135	09-3698	09/17/09	15:50:03	2009	9	5	15	5	Building Fire	Exterior/attached	Improper disposal cigarette
136	09-3559	09/07/09	8:50:48	2009	9	2	8	1	Building Fire	Living	Electrical
137	09-3494	09/02/09	15:32:43	2009	9	44	15	3	Cooking Fire	Kitchen	Grease in oven
138	09-3363	08/25/09	23:37:29	2009	8	3	23	1	Fire, other	Laundry	Lint fire in dryer hose
139	09-3194	08/14/09	14:46:32	2009	8	6	14	1	Cooking Fire	Kitchen	Unattended cooking
140	09-2754	07/14/09	21:15:47	2009	7	3	21	4	Building Fire	Bedroom	Faulty light fixture
141	09-2387	06/22/09	8:21:46	2009	6	2	8	1	Building Fire	Closet	Combust. Close to water heater
142	09-2376	06/21/09	11:39:16	2009	6	11	11	4	Building Fire	Kitchen	Electrical
143	09-2295	06/15/09	19:20:15	2009	6	2	19	5	Building Fire	Closet	Electrical
144	09-2253	06/13/09	11:16:54	2009	6	7	11	3	Building Fire	Garage	Flammable vapor
145	09-2220	06/11/09	4:06:45	2009	6	5	4	1	Building Fire	Kitchen	Combust near water heater
146	09-2181	06/08/09	19:22:53	2009	6	2	19	1	Fire, other	Kitchen	Combus left on stove top
147	09-2083	05/31/09	17:58:21	2009	5	11	17	5	Cooking Fire	Kitchen	Plastic in oven
148	09-1871	05/17/09	14:09:00	2009	5	1	14	4	Building Fire	Exterior/attached	Improperly discarded cigarette
149	09-1656	05/02/09	15:41:27	2009	5	7	15	2	Cooking Fire	Kitchen	Unattended cooking
150	09-1559	04/25/09	13:34:55	2009	4	7	13	3	Cooking Fire	Kitchen	Unattended cooking, oil

		Date of	Time of Incident					NFPD Response			
Study#	Incident#	Incident	Dispatch	Year	Month	weekday	Hour	Zone	Incident Type	Room of origin	Cause
151	09-1553	04/24/09	19:44:55	2009	4	6	19	5	Building Fire	Exterior/attached	Arson
152	09-1302	04/05/09	9:20:28	2009	4	1	9	1	Building Fire	Exterior/attached	Electrical
153	09-1272	04/02/09	18:13:12	2009	4	5	18	4	Cooking Fire	Kitchen	cutting board in oven
154	09-1234	03/31/09	14:08:57	2009	3	3	14	3	Building Fire	Bathroom	Arson
155	09-1130	03/23/09	13:17:28	2009	3	2	13	1	Building Fire	Exterior/attached	Improper disposal of ashes
156	09-1084	03/20/09	10:07:29	2009	3	6	10	3	Fire, other	Garage	Dryer fire, oily rags
157	09-995	03/14/09	15:14:46	2009	3	7	15	3	Building Fire	Living	Electrical
158	09-892	03/07/09	12:58:02	2009	3	7	12	4	Cooking Fire	Kitchen	Unattended cooking
159	09-660	02/18/09	22:31:04	2009	2	4	22	1	Building Fire	Exterior/attached	Electrical
160	09-566	02/11/09	20:44:42	2009	2	4	20	4	Cooking Fire	Kitchen	Burnt food - popcorn
161	09-541	02/09/09	17:47:45	2009	2	2	17	5	Cooking Fire	Kitchen	Grease in oven
162	09-347	01/26/09	6:42:26	2009	1	2	6	3	Cooking Fire	Kitchen	Grease in oven
163	09-334	01/24/09	17:58:00	2009	1	7	17	3	Chimney Fire	Living	Creosote fire in flue
164	09-187	01/15/09	6:13:23	2009	1	5	6	4	Building Fire	Roof	Heater malfunction
165	08-5043	12/31/08	16:24:30	2008	12	4	16	2	Building Fire	Living	Unattended fireplace
166	08-5021	12/30/08	13:07:29	2008	12	3	13	3	Cooking Fire	Kitchen	Grease in oven
167	08-4942	12/24/08	20:38:50	2008	12	4	20	1	Building Fire	Bedroom	Electrical - overloaded strip
168	08-4925	12/23/08	20:29:54	2008	12	3	20	5	Cooking Fire	Kitchen	Plastic in oven
169	08-4881	12/18/08	22:48:06	2008	12	5	22	3	Building Fire	Living	Fire escape fire box into wall
170	08-4772	12/11/08	9:19:31	2008	12	5	9	5	Cooking Fire	Kitchen	Unattended cooking
171	08-4613	12/01/08	13:40:30	2008	12	2	13	5	Building Fire	Living	Improper placement of ashes
172	08-4265	11/05/08	19:44:53	2008	11	4	19	3	Chimney Fire	Living	Creosote fire in flue
173	08-4016	10/19/08	6:46:18	2008	10	1	6	1	Fire, other	Exterior/attached	Improper disposal of cigarette

			Estimated	Estimated.	Estimated.					C
			Estimated	Estimated	Estimated		,, ca	, (D		Smoke/Heat
	_	Occupancy Type	Damage Cost -	Damage Cost -	Damage Cost -		# of Apparatus		Minutes	Detectors
Study#		lookup	Property	Contents	Total	# of Injuries	Assigned	Assigned	Committed	Present?
1	Multi-family	Multi-family	\$O	\$0	\$0	0	1	3	9.12	unk
2	1 or 2 Family	1 or 2 Family	\$O	\$O	\$O	0	6	15	17.55	unk
3	1 or 2 Family	1 or 2 Family	\$0	\$5,000	\$5,000	0	6	15	37.25	unk
4	Multi-family	Multi-family	\$10,000	\$100	\$10,100	0	2	6	74	Y
5	1 or 2 Family	1 or 2 Family	\$150,000	\$50,000	\$200,000	1	8	21	308.27	Y
6	Multi-family	Multi-family	\$0	\$10	\$10	0	1	3	25.95	unk
7	1 or 2 Family	1 or 2 Family	\$0	\$0	\$0	0	5	13	21	Y
8	Multi-family	Multi-family	\$110,000	\$40,000	\$150,000	0	6	15	167.07	Y
9	1 or 2 Family	1 or 2 Family	\$0	\$5	\$5	0	1	3	22.95	Y
10	Multi-family	Multi-family	\$1,000	\$10	\$1,010	1	1	3	53.87	Υ
11	1 or 2 Family	1 or 2 Family	\$0	\$0	\$0	0	6	16	26.52	Υ
12	Trailer	Trailer	\$1,000	\$0	\$1,000	0	4	11	46.68	Y
13	1 or 2 Family	1 or 2 Family	\$0	\$0	\$0	0	5	14	24.53	Y
14	1 or 2 Family	1 or 2 Family	\$0	\$0	\$0	0	5	12	87.35	unk
15	Commercial	Commercial	\$0	\$100	\$100	0	1	3	69.53	unk
16	1 or 2 Family	1 or 2 Family	\$100,000	\$5,000	\$105,000	0	4	8	437	unk
17	Multi-family	Multi-family	\$50,000	\$5,000	\$55,000	0	9	21	127.53	unk
18	Restaurant	Restaurant	\$0	\$3,000	\$3,000	0	5	12	101.1	Y
19	Multi-family	Multi-family	\$500	\$1,500	\$2,000	0	5	14	80.42	Y
20	1 or 2 Family	1 or 2 Family	\$0	\$0	\$0	0	4	12	81.52	unk
21	Multi-family	Multi-family	\$0	\$100	\$100	0	4	11	20.85	Y
22	1 or 2 Family	1 or 2 Family	\$0	\$0	\$0	0	6	15	28.8	Υ
23	Multi-family	Multi-family	\$15,000	\$2,000	\$17,000	0	7	17	163.05	Y
24	Multi-family	Multi-family	\$0	\$0	\$0	0	1	3	25.62	unk
25	Multi-family	Multi-family	\$400	\$0	\$400	0	1	4	20.63	unk
26	Multi-family	Multi-family	\$0	\$20	\$20	0	2	6	28.2	unk
27	1 or 2 Family	1 or 2 Family	\$0	\$500	\$500	0	5	14	43.42	Y
28	Trailer	Trailer	\$800	\$250	\$1,050	0	4	10	34.63	Υ
29	1 or 2 Family	1 or 2 Family	\$0	\$500	\$500	0	6	17	44.4	Y
30	1 or 2 Family	1 or 2 Family	\$1,500	\$0	\$1,500	0	2	4	81.12	Y
31	Restaurant	Restaurant	\$1,000	\$0	\$1,000	0	5	16	68.88	Y
32	1 or 2 Family	1 or 2 Family	\$15,000	\$5,000	\$20,000	0	6	17	100.38	Y
33	Restaurant	Restaurant	\$0	\$500	\$500	0	1	3	55.6	unk
34	Multi-family	Multi-family	\$0	\$500	\$500	0	7	19	47.95	Υ
35	Business	Commercial	\$7,500	\$0	\$7,500	0	5	14	64.63	N
36	Multi-family	Multi-family	\$1,500	\$0	\$1,500	1	6	17	30.8	Υ
37	1 or 2 Family	1 or 2 Family	\$300	\$350	\$650	0	6	15	82.67	Υ
38	1 or 2 Family	1 or 2 Family	\$0	\$200	\$200	0	1	3	32.7	unk
39	Multi-family	Multi-family	\$0	\$100	\$100	0	4	11	19.13	Υ
40	Multi-family	Multi-family	\$200	\$0	\$200	0	4	11	89.9	Υ
41	Business	Commercial	\$2,000	\$0	\$2,000	0	1	3	71.28	unk
42	1 or 2 Family	1 or 2 Family	\$20,000	\$1,000	\$21,000	1	6	15	67.47	Υ
43	Trailer	Trailer	\$25,000	\$1,000	\$26,000	0	4	12	87.92	Y
44	Mult-family	Multi-family	\$0	\$0	\$0	0	1	3	18.08	unk
45	Multi-family	Multi-family	\$1,500	\$135	\$1,635	0	5	15	90.3	Υ
46	1 or 2 Family	1 or 2 Family	\$0	\$0	\$0	1	6	15	22.9	unk
47	1 or 2 Family	1 or 2 Family	\$0	\$0	\$0	0	1	3	15.83	unk
48	Multi-family	Multi-family	\$0	\$0	\$0	0	1	3	16.47	unk
49	Multi-family	Multi-family	\$400	\$50	\$450	0	6	17	26.05	Y
50	Restaurant	Restaurant	\$O	\$0	\$0	0	5	14	24.75	N

		_	Estimated	Estimated	Estimated					Smoke/Heat
		Occupancy Type	Damage Cost -	Damage Cost -	Damage Cost -		# of Apparatus		Minutes	Detectors
Study#	Occupancy Type	lookup	Property	Contents	Total	# of Injuries	Assigned	Assigned	Committed	Present?
51	1 or 2 Family	1 or 2 Family	\$O	\$500	\$500	0	1	3	24.75	unk
52	Educational	Educational	\$0	\$200	\$200	0	1	1	29	unk
53	1 or 2 Famiily	1 or 2 Family	\$2,500	\$1,500	\$4,000	0	6	15	51.15	Y
54	1 or 2 Family	1 or 2 Family	\$200	\$0	\$200	0	6	16	24.67	unk
55	1 or 2 Family	1 or 2 Family	\$O	\$O	\$O	0	5	14	37.93	Y
56	1 or 2 Family	1 or 2 Family	\$O	\$O	\$O	0	1	3	7.63	unk
57	1 or 2 Family	1 or 2 Family	\$15,000	\$O	\$15,000	0	6	16	247.28	N .
58	1 or 2 Family	1 or 2 Family	\$3,000	\$0	\$3,000	0	6	15	93	unk
59	Multi-family	Multi-family	\$O	\$700	\$700	0	8	17	75.38	unk
60	1 or 2 Family	1 or 2 Family	\$0	\$1,500	\$1,500	0	5	14	61.65	N
61	1 or 2 Family	1 or 2 Family	\$1,000	\$0	\$1,000	2	7	20	59-33	unk
62	1 or 2 Family	1 or 2 Family	\$0	\$0	\$0	0	4	11	32.27	unk
63	Multi-family	Multi-family	\$0	\$0 	\$0	0	1	3	14.7	Y
64	1 or 2 Family	1 or 2 Family	\$0	\$300	\$300	0	2	6	63.32	Y
65	1 or 2 Family	1 or 2 Family	\$5,000	\$0	\$5,000	0	7	16	102.43	Y
66	1 or 2 Family	1 or 2 Family	\$O	\$500	\$500	0	1	3	13.53	unk
67	Multi-family	Multi-family	\$400	\$200	\$600	0	4	11	37.62	unk
68	1 or 2 Family	1 or 2 Family	\$0	\$200	\$200	0	6	13	55.77	Y
69	1 or 2 Family	1 or 2 Family	\$150,000	\$50,000	\$200,000	0	8	19	266.38	Y
70	Multi-family	Multi-family	\$5,000	\$10,000	\$15,000	0	4	12	202.6	Y
71	Multi-family	Multi-family	\$50	\$300	\$350	0	6	15	20.32	Y
72	Trailer	Trailer	\$10,000	\$200	\$10,200	0	6	15	112.98	Y
73	Multi-family	Multi-family	\$O	\$O	\$O	0	1	3	13.1	unk
74	1 or 2 Family	1 or 2 Family	\$300	\$100	\$400	0	7	18	79	unk
75	1 or 2 Family	1 or 2 Family	\$10,000	\$3,000	\$13,000	0	4	11	139.58	unk
76	Business	Commercial	\$300	\$0	\$300	0	11	3	52.57	Y
	Multi-family	Multi-family	\$500	\$0	\$500	0	6	15	39.77	unk
78	1 or 2 Family	1 or 2 Family	\$O	\$30	\$30	0	1	3	16.43	Y
79	1 or 2 Family	1 or 2 Family	\$500	\$0	\$500	0	3	9	89.77	N
80	Trailer	Trailer	\$50	\$O	\$50	0	5	14	28.42	N
81	1 or 2 Family	1 or 2 Family	\$0	\$3,000	\$3,000	0	5	14	20.97	unk
82	1 or 2 Family	1 or 2 Family	\$0	\$500	\$500	0	6	15	34.47	Y
83	1 or 2 Family	1 or 2 Family	\$10,000	\$500	\$10,500	0	5	14	164.08	Y
84	1 or 2 Family	1 or 2 Family	\$5,000	\$0	\$5,000	0	5	15	101.32	N Y
85 86	1 or 2 Family	1 or 2 Family	\$8,000	\$2,000	\$10,000	0	6	15	79-47	Y
	Multi-family	Multi-family	\$0	\$0 *200	\$0	0	4	11	17.33	
87 88	1 or 2 Family	1 or 2 Family	\$0	\$200	\$200	0	1	3	21.97	unk Y
88	Multi-family Multi-family	Multi-family Multi-family	\$2,000	\$100 \$0	\$2,100	0	5	14	23.55	Y
		Multi-family Multi-family	\$2,500		\$2,500	0	5	14	102.37	unk
90	Multi-family	<u> </u>	\$0 \$0	\$65	\$65	·	4	10	22.57	unk unk
91	1 or 2 Family 1 or 2 Family	1 or 2 Family 1 or 2 Family	\$0 \$200	\$0 \$100	\$0 \$300	0	5 1	15	39.57 10.65	unk unk
92	1 or 2 Family	1 or 2 Family	\$200 \$0		····	0	1	3	21.2	unk
93	Multi-family	Multi-family		\$250 \$10,000	\$250 \$85,000	0		3 26	205.68	Y
94	Trailer	Trailer	\$75,000 \$110,000	<u> </u>	\$05,000	1 - Fatal	14	18	830.12	unk
95 96	1 or 2 Family	1 or 2 Family	\$110,000	\$30,000 \$50	\$140,000 \$100	1-Falai 0	7	ò	ç	unk
	1 or 2 Family	1 or 2 Family	\$50	\$50 \$0	·	0	1	3	19.4	unk Y
97 98	Multi-family	Multi-family	\$25,000	\$0 \$100	\$25,000 \$200	0	5	14 15	211.7	Υ Υ
_	Commercial	Commercial	\$100 \$500	\$100 \$0		0	5	15	19.23 22.68	unk
99 100	Multi-family	Multi-family	\$500 \$5	\$0 \$0	\$500 \$5	0	1	3	ţ	unk Y
100	iviuithidillily	iviuiti-idillily	?>	ŞU	₹ ? 5	U	I I	. 5	16.15	ī

			- · · · ·	- · · · ·	F					c 1 /11 /
			Estimated	Estimated	Estimated					Smoke/Heat
		Occupancy Type	Damage Cost -	Damage Cost -	Damage Cost -		# of Apparatus		Minutes	Detectors
Study#	Occupancy Type	lookup	Property	Contents	Total	# of Injuries	Assigned	Assigned	Committed	Present?
101	1 or 2 Family	1 or 2 Family	\$0	\$50	\$50	0	7	16	63.43	Y
102	1 or 2 Family	1 or 2 Family	\$1,000	\$0	\$1,000	0	4	12	89.57	unk
103	1 or 2 Family	1 or 2 Family	\$50	\$0	\$50	0	1	3	24.43	Y
104	1 or 2 Family	1 or 2 Family	\$70,000	\$15,000	\$85,000	0	5	15	505.8	N
105	Multi-family	Multi-family	\$0	\$0	\$0	0	1	3	22.88	unk
106	1 or 2 Family	1 or 2 Family	\$0	\$0	\$0	0	5	14	5.75	unk
107	1 or 2 Family	1 or 2 Family	\$0	\$0	\$0	0	1	3	15.42	Υ
108	Multi-family	Multi-family	\$100	\$300	\$400	0	1	3	21.43	Υ
109	Multi-family	Multi-family	\$12,000	\$1,000	\$13,000	0	5	14	81.38	Y
110	1 or 2 Family	1 or 2 Family	\$425,000	\$10,000	\$435,000	0	11	23	508.67	Y
111	1 or 2 Family	1 or 2 Family	\$0	\$0	\$0	0	4	11	33.58	unk
112	1 or 2 Family	1 or 2 Family	\$0	\$50	\$50	0	5	15	39.17	Υ
113	1 or 2 Family	1 or 2 Family	\$450,000	\$100,000	\$550,000	1	9	23	358.27	unk
114	1 or 2 Family	1 or 2 Family	\$337,500	\$20,000	\$357,500	0	13	27	296.15	unk
115	Business	Commercial	\$500	\$100	\$600	0	7	18	78.15	Υ
116	1 or 2 Family	1 or 2 Family	\$325,000	\$10,000	\$335,000	0	5	14	274.07	Y
117	Multi-family	Multi-family	\$36,000	\$10,000	\$46,000	0	7	18	133.87	N
118	Trailer	Trailer	\$20,000	\$5,000	\$25,000	0	4	11	111.22	Y
119	1 or 2 Family	1 or 2 Family	\$0	\$1,000	\$1,000	0	6	16	55.42	Y
120	Multi-family	Multi-family	\$100	\$100	\$200	0	1	3	20.37	Y
121	1 or 2 Family	1 or 2 Family	\$271,890	\$162,855	\$434,745	0	13	27	275.13	Υ
122	1 or 2 Family	1 or 2 Family	\$0	\$0	\$0	0	5	14	29.98	Y
123	1 or 2 Family	1 or 2 Family	\$16,000	\$500	\$16,500	0	6	17	94.67	Y
124	Multi-family	Multi-family	\$25	\$0	\$25	0	5	14	11.47	unk
125	1 or 2 Family	1 or 2 Family	\$60,000	\$30,000	\$90,000	0	6	15	192.47	Y
126	1 or 2 Family	1 or 2 Family	\$8,800	\$10,000	\$18,800	0	6	15	118.63	Y
127	1 or 2 Family	1 or 2 Family	\$0	\$1,000	\$1,000	0	4	12	13.78	unk
128	1 or 2 Family	1 or 2 Family	\$0	\$O	\$0	0	1	3	11	unk
129	Business	Commercial	\$500	\$0	\$500	0	9	23	122.22	Υ
130	1 or 2 Family	1 or 2 Family	\$0	\$200	\$200	0	1	3	20.35	unk
131	1 or 2 Family	1 or 2 Family	\$75,000	\$25,000	\$100,000	0	8	20	235.08	Y
132	1 or 2 Family	1 or 2 Family	\$24,750	\$15,000	\$39,750	0	6	17	307.47	Y
133	Multi-family	Multi-family	\$250	\$O	\$250	0	5	14	40.73	Υ
134	Multi-family	Multi-family	\$O	\$500	\$500	0	5	14	30.55	unk
135	Multi-family	Multi-family	\$105,625	\$20,000	\$125,625	0	10	28	228.18	unk
136	1 or 2 Family	1 or 2 Family	\$300,000	\$0	\$300,000	0	13	27	523.2	unk
137	1 or 2 Family	1 or 2 Family	\$1,000	\$0	\$1,000	0	1	3	45.8	unk
138	Multi-family	Multi-family	\$25	\$0	\$25	0	3	8	23.7	unk
139	Multi-family	Multi-family	\$0	\$0	\$0	0	5	14	12.05	unk
140	1 or 2 Family	1 or 2 Family	\$0	\$250	\$250	0	5	15	31.72	unk
141	1 or 2 Family	1 or 2 Family	\$150	\$250	\$400	0	5	15	47-35	unk
142	1 or 2 Family	1 or 2 Family	\$100	\$50	\$150	0	5	14	23.1	unk
143	Multi-family	Multi-family	\$0	\$0	\$0	0	4	11	23.72	unk
144	1 or 2 Family	1 or 2 Family	\$0	\$15	\$15	0	1	3	13.73	unk
145	Restaurant	Restaurant	\$150,000	\$100,000	\$250,000	0	9	18	650.45	N
146	Multi-family	Multi-family	\$0	\$0	\$0	0	1	3	7.95	unk
147	Trailer	Trailer	\$0	\$0	\$0	0	4	11	34.63	unk
148	Multi-family	Multi-family	\$5,000	\$0	\$5,000	0	5	12	87.97	N - outside
149	1 or 2 Family	1 or 2 Family	\$800	\$0	\$800	0	7	18	143.62	Y
150	1 or 2 Family	1 or 2 Family	\$O	\$O	\$ 0	0	1	3	8.77	unk

Study#	Occupancy Type	Occupancy Type lookup	Estimated Damage Cost - Property	Estimated Damage Cost - Contents	Estimated Damage Cost - Total	# of Injuries	# of Apparatus Assigned	# of Personnel Assigned	Minutes Committed	Smoke/Heat Detectors Present?
151	Commercial	Commercial	\$50,000	\$0	\$50,000	0	18	41	225.33	N
152	1 or 2 Family	1 or 2 Family	\$150,000	\$5,000	\$155,000	0	5	14	189.13	Υ
153	1 or 2 Family	1 or 2 Family	\$500	\$50	\$550	0	5	14	21.3	unk
154	Educational	Educational	\$300	\$200	\$500	0	5	10	48.67	Υ
155	Multi-family	Multi-family	\$10,000	\$500	\$10,500	0	5	15	112.6	unk
156	1 or 2 Family	1 or 2 Family	\$700	\$10	\$710	0	1	3	39.68	unk
157	1 or 2 Family	1 or 2 Family	\$13,000	\$1,000	\$14,000	0	6	17	140.57	Υ
158	1 or 2 Family	1 or 2 Family	\$379,925	\$100,000	\$479,925	0	7	19	406.65	unk
159	Commercial	Commercial	\$40,000	\$0	\$40,000	0	6	16	216.8	N
160	Multi-family	Multi-family	\$O	\$0	\$O	0	4	11	23.2	unk
161	Multi-family	Multi-family	\$500	\$20	\$520	0	5	14	14.57	Υ
162	1 or 2 Family	1 or 2 Family	\$O	\$0	\$O	0	1	3	16.28	unk
163	1 or 2 Family	1 or 2 Family	\$O	\$0	\$0	0	3	8	26.12	unk
164	Multi-family	Multi-family	\$1,000	\$0	\$1,000	0	5	14	36.13	Υ
165	1 or 2 Family	1 or 2 Family	\$5,000	\$0	\$5,000	0	5	14	68.42	unk
166	1 or 2 Family	1 or 2 Family	\$O	\$0	\$O	0	1	3	15	unk
167	1 or 2 Family	1 or 2 Family	\$ 0	\$0	\$0	0	4	11	75.58	unk
168	1 or 2 Family	1 or 2 Family	\$O	\$0	\$0	0	1	3	14.32	unk
169	1 or 2 Family	1 or 2 Family	\$15,000	\$2,500	\$17,500	0	4	11	101.12	Υ
170	1 or 2 Family	1 or 2 Family	\$O	\$500	\$500	0	4	12	150.47	Υ
171	Commercial	Commercial	\$25,000	\$O	\$25,000	0	7	15	146.75	N
172	Multi-family	Multi-family	\$O	\$O	\$0	0	5	14	42.98	Y
173	Multi-family	Multi-family	\$500	\$0	\$500	0	1	3	26.32	N - outside

		Detectors	Extinguishing	Extinguishing	Est. Damage	Est. Damage	
	Detectors	Alerted	System	System	Cost -	Cost -	
Study#	Activated	Occupants?	Present?	Activated?	Contents	Structure	Notes
1	unk	unk	unk	unk	n/a	n/a	
2	unk	unk	unk	unk	n/a	n/a	
3	unk	unk	unk	unk	n/a	\$5,000	heat/ac unit with tarp on top
4	Υ	Y	Υ	Y	\$10,000	\$100	Need water vac
5	Υ	Υ	N	n/a	\$150,000	\$50,000	Duplex/family dog fatality/occupant burned feet trying to save dog
6	unk	unk	unk	unk	n/a	\$10	
7	Υ	Y	N	n/a	n/a	n/a	
8	Y	Y	N	n/a	\$110,000	\$40,000	
9	Υ	Y	Y	N	n/a	\$5	
10	Υ	Y	unk	n/a	\$1,000	\$10	Next Key shelter
11	Υ	Y	unk	n/a	n/a	n/a	
12	Υ	Y	N	n/a	\$1,000	n/a	Armstrong trailer park
13	unk	unk	unk	n/a	n/a	n/a	
14	unk	unk	unk	n/a	n/a	n/a	
15	unk	unk	unk	n/a	n/a	\$100	Manufacturing, Commercial
16	unk	unk	N	n/a	\$100,000	\$5,000	Marajuana grow op
17	unk	unk	N	n/a	\$50,000	\$5,000	
18	N	N	Y	N - malfunction	n/a	\$3,000	McDonalds
19	Y	Y	Y	Y	\$500	\$1,500	
20	unk	unk	unk	n/a	n/a	n/a	
21	N	N	N	n/a	n/a	\$100	
22	Υ	Y	N	n/a	n/a	n/a	
23	Υ	Y	N	n/a	\$15,000	\$2,000	
24	unk	unk	unk	n/a	n/a	n/a	
25	unk	unk	unk	n/a	\$400	n/a	
26	unk	unk	unk	n/a	n/a	\$20	
27	Y	Y	N	n/a	n/a	\$500	
28	Υ	N	N	n/a	\$800	\$250	elderly resident at Los Robles
29	N - too small	n/a	N	n/a	n/a	\$500	
30	N - too small	n/a	N	n/a	\$1,500	n/a	
31	N - facia on fire	n/a	Y	N - too small	\$1,000	n/a	
32	Υ	Y	N	n/a	\$15,000	\$5,000	
33	unk	n/a	unk	unk	n/a	\$500	
34	Y	Y	N	n/a	n/a	\$500	
35	N	n/a	N	n/a	\$7,500	n/a	Convenience store
36	Y	Y	N	n/a	\$1,500	n/a	Burn injury after throwing water on oil fire
37	Y	Y	N	n/a	\$300	\$350	Commercial sander on fire, heat and saw dust likely cause
38	unk 	n/a	n/a	n/a	n/a	\$200	
39	Y	Y	Y	N - too small	n/a	\$100	
40	Υ	Y	N	n/a	\$200	n/a	Dormitory
41	unk	unk	unk	n/a	\$2,000	n/a	
42	Y	Y	N N	n/a	\$20,000	\$1,000	One resident with smoke inhalation
43		Y	<u> </u>	n/a	\$25,000	\$1,000	Los Robles
44	unk Y	unk Y	unk	n/a	n/a	n/a	
45			unk	n/a	\$1,500	\$135	conclusion and a string and a s
46	unk	unk	N	n/a	n/a	n/a	smoke inhalation
47	unk	unk	unk	n/a	n/a	n/a	
48	unk Y	unk Y	unk N	n/a	n/a	n/a	
49	N N	n/a	Y	n/a Y	\$400	\$50 p/s	Ansul hood activation
50	IN	n/a	} Y	Υ	n/a	n/a	AHSUI HOOU ACUVATION

		Detectors	Extinguishing	Extinguishing	Est. Damage	Est. Damage	
	Detectors	Alerted	System	System	Cost -	Cost -	
Study#	Activated	Occupants?	Present?	Activated?	Contents	Structure	Notes
51	unk	unk	N	n/a	n/a	\$500	
52	unk	unk	unk	n/a	n/a	\$200	Elementary School
53	Y	Y	N	n/a	\$2,500	\$1,500	
54	unk	unk	unk	n/a	\$200	n/a	
55	unk	unk	N	n/a	n/a	n/a	
56	unk	unk	unk	n/a	n/a	n/a	
57	n/a	n/a	N	n/a	\$15,000	n/a	
58	unk	unk	unk	n/a	\$3,000	n/a	
59	unk	unk	unk	n/a	n/a	\$700	
60	n/a	n/a	unk	unk	n/a	\$1,500	
61	unk	unk	unk	unk	\$1,000	n/a	
62	unk	unk	unk	unk	n/a	n/a	
63	Υ	Y	N	n/a	n/a	n/a	
64	N - unk why	n/a	Y	N - too small	n/a	\$300	
65	Υ	Y	N	n/a	\$5,000	n/a	
66	unk	unk	unk	n/a	n/a	\$500	
67	unk	unk	unk	unk	\$400	\$200	
68	Y	unk	N	n/a	n/a	\$200	
69	Y	unk	N	n/a	\$150,000	\$50,000	
70	N - no battery	n/a	N	n/a	\$5,000	\$10,000	
71	Y	Y	N	n/a	\$50	\$300	
72	Y	Y	N	n/a	\$10,000	\$200	Marin Valley MHP
73	unk	unk	unk	unk	n/a	n/a	
74	unk	unk	unk	unk	\$300	\$100	
75	unk	unk	unk	unk	\$10,000	\$3,000	
76	N - too small	n/a	unk	N	\$300	n/a	office
77	unk	unk	N	n/a	\$500	n/a	
78	Y	Y	unk	n/a	n/a	\$30	Coffee pot left on
79	N	N	N	n/a	\$500	n/a	
80	N	N	N	n/a	\$50	n/a	Silver Penny MHP
81	unk	unk	unk	unk	n/a	\$3,000	
82	Y	Y	N	n/a	n/a	\$500	
83	N	n/a	N	n/a	\$10,000	\$500	
84	N	N	N	n/a	\$5,000	n/a	
85	N - no battery	N - no battery	N	n/a	\$8,000	\$2,000	
86	N - too small	n/a	Y	N - too small	n/a	n/a	
87	unk	unk	unk	unk	n/a	\$200	
88	N - too small	n/a	Y	N - too small	\$2,000	\$100	
89	N - fire outside	n/a	Y	Y	\$2,500	n/a	
90	unk	unk	unk	unk	n/a	\$65	
91	unk unk	unk	unk N	unk n/a	n/a	n/a	
92	N - fire outside	unk n/a	}		\$200 n/a	\$100 \$250	while operating cump nump
93	Y Y	n/a Y	unk N	unk n/a		\$250	while operating sump pump while using toaster
94	unk	unk	N N	n/a n/a	\$75,000	\$10,000	Los Robles MHP
95	unk	unk	unk	n/a n/a	\$110,000	\$30,000	LOS NODIES MITI
96	unk		unk N	n/a n/a	\$50 \$35,000	\$50 p/s	
97 98	Y	unk Y	N N	n/a n/a	\$25,000 \$100	n/a \$100	
98	unk	unk	unk	n/a unk	\$100 \$500	\$100 n/a	Grocery store
100	N - too small	n/a	N N	n/a	\$500 \$5	n/a	anoce y store
100	is " LOO SIIIdli	II/a	IN IN	II/a	?>>	II/a	8

		Detectors	Extinguishing	Extinguishing	Est. Damage	Est. Damage	
	Detectors	Alerted	System	System	Cost -	Cost -	
Study#	Activated	Occupants?	Present?	Activated?	Contents	Structure	Notes
101	Y	Y	Υ	N- too small	n/a	\$50	
102	unk	unk	unk	unk	\$1,000	n/a	
103	N - too small	n/a	N	n/a	\$50	n/a	
104	N	n/a	N	n/a	\$70,000	\$15,000	
105	unk	unk	unk	N	n/a	n/a	
106	unk	unk	unk	unk	n/a	n/a	
107	Y	Y	N	n/a	n/a	n/a	
108	Y	Y	N	n/a	\$100	\$300	
109	Y	Y	N	n/a	\$12,000	\$1,000	
110	Υ	N - no occupants	Y	Y - ineffective	\$425,000	\$10,000	
111	unk	unk	unk	unk	n/a	n/a	
112	Y	Y	N	n/a	n/a	\$50	
113	unk	unk	N	n/a	\$450,000	\$100,000	
114	unk	unk	N	n/a	\$337,500	\$20,000	
115	N - outside	n/a	N	n/a	\$500	\$100	breaker box
116	Y	Y	N	n/a	\$325,000	\$10,000	power strip
117	n/a	n/a	N	n/a	\$36,000	\$10,000	
118	Y	Y	N	n/a	\$20,000	\$5,000	arc from ungrounded microwave installation Marin Valley MHP
119	N - missing battery	n/a	N	n/a	n/a	\$1,000	
120	Y	unk	Y	N - too small	\$100	\$100	
121	Υ	Υ	N	n/a	\$271,890	\$162,855	
122	N - too small	n/a	N	n/a	n/a	n/a	
123	Y	Y	Υ	Y	\$16,000	\$500	
124	unk	unk	unk	unk	\$25	n/a	
125	N - missing battery		N	n/a	\$60,000	\$30,000	
126	Υ	Υ	Υ	Y	\$8,800	\$10,000	
127	unk	unk	unk	unk	n/a	\$1,000	
128	unk	unk	unk	unk	n/a	n/a	
129	N - outside	n/a	Y	N - outside	\$500	n/a	decretive light strip
130	unk	unk	unk	unk	n/a	\$200	dish washer
131	Y	Y	Y	N - system off	\$75,000	\$25,000	
132	Y	Υ	Y	Y	\$24,750	\$15,000	
133	Y	Y	N	n/a	\$250	n/a	
134	unk	unk	unk	unk ,	n/a	\$500	
135	unk	unk	N	n/a	\$105,625	\$20,000	
136	unk	unk	Y	N - system off	\$300,000	n/a	
137	unk	unk	unk	unk	\$1,000	n/a	
138	unk	unk	unk	unk	\$25	n/a	
139	unk	unk	unk	unk	n/a	n/a	
140	unk	unk	unk	unk	n/a	\$250	
141	unk	unk	N	n/a	\$150	\$250	Vent hood fan malfunction
142	unk unk	unk	unk	unk	\$100	\$50 p/s	Vent nood fan malfunction Fire in breaker box
143	unk	unk unk	unk unk	unk unk	n/a n/a	n/a	Cleaning parts with gasoline, ignited by water heater
144			uilK	uilK		\$15	creating parts with gasonine, ignited by water fleater
145	n/a unk	n/a unk	unk	unk	\$150,000	\$100,000	
146				unk unk	n/a	n/a	Marin Valley MHP
147 148	unk n/a	unk n/a	unk N	n/a	n/a	n/a n/a	givianin vancy ivinir
_	n/a Y	n/a Y	N N	n/a n/a	\$5,000 \$800	·	
149 150	unk	unk	N N	n/a n/a	\$800 n/a	n/a n/a	
150	UIIK	UHK	IN	II/d	II/d	II/d	š

		Detectors	Extinguishing	Extinguishing	Est. Damage	Est. Damage	
	Detectors	Alerted	System	System	Cost -	Cost -	
Study#	Activated	Occupants?	Present?	Activated?	Contents	Structure	Notes
151	n/a	n/a	N	n/a	\$50,000	n/a	abandoned miltary building
152	unk	N	Y	Y	\$150,000	\$5,000	sprinklers uneffective due to location of heads relative to fire location
153	unk	unk	unk	unk	\$500	\$50	
154	Υ	Y	Y	Y	\$300	\$200	High School
155	unk	unk	N	n/a	\$10,000	\$500	
156	unk	unk	unk	unk	\$700	\$10	
157	Υ	N - not home	N	n/a	\$13,000	\$1,000	
158	unk	unk	N	n/a	\$379,925	\$100,000	
159	n/a	n/a	N	n/a	\$40,000	n/a	strip mall
160	unk	unk	unk	unk	n/a	n/a	
161	unk	unk	Y	unk	\$500	\$20	
162	unk	unk	unk	unk	n/a	n/a	
163	unk	unk	unk	unk	n/a	n/a	
164	Υ	Υ	N	n/a	\$1,000	n/a	
165	unk	unk	N	n/a	\$5,000	n/a	
166	unk	unk	unk	unk	n/a	n/a	
167	unk	unk	unk	unk	n/a	n/a	
168	unk	unk	unk	unk	n/a	n/a	
169	N - too small	n/a	N	n/a	\$15,000	\$2,500	
170	Y	N - unoccupied	Y	Y	n/a	\$500	Sprinkler extinguished fire. Neighbors called 911 b/c water coming from garage.
171	n/a	n/a	N	n/a	\$25,000	n/a	Hamilton Officers Club
172	N - too small	n/a	N	n/a	n/a	n/a	
173	n/a	n/a	N	n/a	\$500	n/a	

Appendix B

City of Novato Master Housing List for Multi-family Occupancies provided by Gary P. Beretta, Supervising Code Enforcement Officer, City of Novato, (415) 899-8928

124-271-34	197 SAN ANDREAS DR	4
124-292-09	285 SAN MARIN DR	5
125-610-21	31 Pinheiro	40
140-021-61	1811 NOVATO BLVD	70
140-031-44	1725 NOVATO BLVD	30
140-031-64	1721 NOVATO BLVD	18
140-062-06	1599 SO. NOVATO BLVD	35
140-062-07	1599 SO. NOVATO BLVD	12
140-131-22	806 Diablo	61
140-221-42	1500 SO NOVATO BLVD	99
140-273-41	1606 HILL RD	24
140-273-52/57	1610 HILL RD	18
140-273-53	711 DIABLO AVE	17
140-291-23	1511 SO NOVATO BLVD	56
140-292-01	1524 (1518) HILL RD	92
140-360-65	819 DIABLO AVE	33
140-360-66	809 DIABLO AVE	33
140-360-67	805 DIABLO AVE	35
140-360-68	815 DIABLO AVE	35
141-201-03	1771 GRANT AVE	16
141-211-18	1001 EIGHTH ST	18
141-212-04	1000 EIGHTH ST	13
141-212-18	1725 MARION AVE	166
141-221-47	44 JADE CT	18
141-221-48	39 JADE CT	4
141-221-49	29 JADE CT	4
141-221-50	19 JADE CT	4
141-221-51	9 JADE CT	4
141-221-52	1510 VALLEJO AVE	4
141-221-60	1506 VALLEJO AVE	7
141-221-61	1504 VALLEJO AVE	4
141-221-62	2 ROMAR CT	46
141-221-63	6 ROMAR CT	12
141-233-06	1201 SECOND ST	4
141-233-09	1300 OLIVE AVE	5
141-234-04	1200 SECOND ST	4
141-234-05	1202 Olive Ave.	4
141-234-06	1126 (1128) OLIVE AVE	30
141-234-18	1100 OLIVE AVE	16
141-241-16	1125 THIRD ST	5

141-241-22 1129 THIRD ST 141-241-23 1126 FOURTH ST 141-241-24 1109 THIRD ST 141-241-25 1113 THIRD ST 141-241-26 1121 THIRD ST	9 4 9 4 4 4 5 5
141-241-23 1126 FOURTH ST 141-241-24 1109 THIRD ST 141-241-25 1113 THIRD ST 141-241-26 1121 THIRD ST	9 4 4 4 4 5
141-241-24 1109 THIRD ST 141-241-25 1113 THIRD ST 141-241-26 1121 THIRD ST	4 4 4 4 5
141-241-25 1113 THIRD ST 141-241-26 1121 THIRD ST	4 4 4 5
141-241-26 1121 THIRD ST	4 4 5
	4 4 5
444 044 07 4447 TUDD OT	4 5
	5
	5
	5
	4
141-243-02 1117 OLIVE AVE	5
	8
	4
	9
	5
141-251-28 1040 SEVENTH ST	5
141-251-30 1052 SEVENTH ST	4
141-251-31 1048 SEVENTH ST	4
141-251-32 1044 SEVENTH ST	5
141-252-05 1045 FIFTH ST	4
141-252-06 1041 FIFTH ST	0
141-252-12 1014 SIXTH ST 1	0
141-252-17 1036 SIXTH ST	4
141-252-21 1040 SIXTH ST	8
141-253-05 1033 FOURTH ST	4
141-253-26 1046 FIFTH ST	4
141-261-06 1025 THIRD ST	5
141-261-25 1035 THIRD ST	4
141-261-34 1041 THIRD ST	4
141-262-01 1201 (1207) VALLEJO AVE 1	5
141-262-16 1020 THIRD ST	5
141-262-21 1221 VALLEJO AVE 2	0
	4
141-262-24 1033 SECOND ST	4
141-262-25 1029 SECOND ST	5
141-262-26 1014 THIRD ST	4
141-262-27 1016 THIRD ST	4
	4

141-263-17	1020 SECOND ST	
141-263-22	1040 SECOND ST	5
141-263-31	1048 SECOND ST	9
141-271-08	1509 PARK CT	4
141-271-23	1145 ELM DR	40
141-285-25	1140 ELM DR	4
141-285-27	950 FOURTH ST	4
141-305-01	924 GEORGE ST	16
141-340-23	1130 SEVENTH ST	56
143-072-41	729 (733) CHERRY ST	15
146-013-10	2393 VINEYARD RD	4
152-011-17	1486 SO NOVATO BLVD	58
152-011-21	1490 SO NOVATO BLVD	14
152-111-04	1304 LEAFWOOD DR	6
152-111-05	1306 LEAFWOOD DR	6
152-111-06	1308 LEAFWOOD DR	6
152-111-07	1310 LEAFWOOD DR	6
152-111-08	1312 LEAFWOOD DR	6
152-111-09	1312 LEAFWOOD DR	6
152-111-10	1316 LEAFWOOD DR	6
152-111-11	1318 LEAFWOOD DR	6
152-111-12	1320 LEAFWOOD DR	6
152-111-14	1323 LEAFWOOD DR	6
152-111-15	1321 LEAFWOOD DR	6
152-111-16	1319 LEAFWOOD DR	6
152-111-17	1317 LEAFWOOD DR	6
152-111-36	1313-1315 LEAFWOOD	12
152-111-27	1307 LEAFWOOD DR	6
152-111-28	1305 LEAFWOOD DR	6
152-111-29	325 ROWLAND BLVD	32
152-111-34	1309 LEAFWOOD DR	6
152-111-35	1311 LEAFWOOD DR	6
152-254-33	100 REDWOOD BLVD	14
152-254-34	500 CUTLASS DR	17
152-254-35	600 (400) CUTLASS DR	10
152-254-37	100 CUTLASS DR	15
152-261-54	(24) COWBARN LN	90
153-043-02	7400 REDWOOD BLVD	4
153-045-04	815 SWEETSER AVE	4
153-045-17	841 SWEETSER AVE	6

452 040 04	OOC ODANIT AVE	4
153-046-01	926 GRANT AVE	4
153-052-02	1002 RAILROAD AVE	7 6
153-055-07	699 LOGAN ST	4
153-056-07 153-064-08	919 SCOTT CT 839 REICHERT AVE	4
153-064-06	845 REICHERT AVE	6
153-064-09	850 REICHERT AVE	5
153-162-60	7020 REDWOOD HWY	17
155-102-00	1009 GREENOAK DR	180
155-020-52	5410 REDVOOD HWY(NAVE DR)	16
155-490-90	22 KELLY CT	44
155-490-91	22 EDWARDS CT	33
155-500-67	51 TINKER WAY	4
155-500-71	42 BOLLING DR	4
155-500-72	82 BOLLING DR	4
155-541-07	BAY VISTA @ MEADOW PARK	220
155-550-04	462 BOLLING CIR	6
155-550-03	122 BOLLING CIR	6
155-561-04	60 Moffett Ct.	4
157-690-19	420 (410) SO. PALM DR	128
160-020-38	199 POSADA DEL SOL	65
160-020-47	235 POSADA DEL SOL	38
160-020-50	200 POSADA DEL SOL	55
160-040-20	1000 IGNACIO BLVD	27
160-150-28	1000 IGNACIO BLVD	27
160-150-55	626 OWEN DR	50
160-161-12	450 ENTRADA DR	16
160-161-13	450 ENTRADA DR	8
160-161-14	450 ENTRADA DR	5
160-161-15	450 ENTRADA DR	16
160-161-16	450 ENTRADA DR	16
160-161-17	450 ENTRADA DR	4
160-161-18	450 ENTRADA DR	24
160-201-06	401 NORMAN DR	8
160-201-22	49 IGNACIO LN	10
160-201-26	391 ENTRADA DR	18
160-281-01	380(420) ALAMEDA DEL PRADO	96
160-302-22	175 LOS ROBLES RD	10
160-302-30	195 LOS ROBLES RD	39

160-302-38	14 17 25 19 12 18 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
160-302-39	25 19 12 18 4 4 4 4 4 4 4 4 4 4 4
160-302-41 100 CIELO LN 160-302-42 120 CIELO LN 160-421-09 980 IGNACIO BLVD 160-581-01 2 CLAY CT 160-581-03 2 GRASS CT 160-581-04 7 GRASS CT 160-581-06 46 Clay CT (Grass) 160-581-07 63 CLAY CT 160-581-08 16 CLAY CT 160-581-09 30 CLAY CT 160-581-10 47 CLAY CT 160-581-11 53 CLAY CT 160-581-12 33 CLAY CT 160-581-13 25 CLAY CT 160-581-14 17 CLAY CT 160-581-15 9 CLAY CT 160-581-16 1 CLAY CT 160-581-16 1 CLAY CT 160-611-01 495 IGNACIO BLVD 160-611-02 481 IGNACIO BLVD 160-611-03 475 IGNACIO BLVD	19 12 18 4 4 4 4 4 4 4 4 4 4
160-302-42 120 CIELO LN 160-421-09 980 IGNACIO BLVD 160-581-01 2 CLAY CT 160-581-03 2 GRASS CT 160-581-04 7 GRASS CT 160-581-06 46 Clay CT (Grass) 160-581-07 63 CLAY CT 160-581-08 16 CLAY CT 160-581-09 30 CLAY CT 160-581-10 47 CLAY CT 160-581-11 53 CLAY CT 160-581-12 33 CLAY CT 160-581-13 25 CLAY CT 160-581-14 17 CLAY CT 160-581-15 9 CLAY CT 160-581-16 1 CLAY CT 160-581-16 1 CLAY CT 160-611-01 495 IGNACIO BLVD 160-611-02 481 IGNACIO BLVD	12 18 4 4 4 4 4 4 4 4 4 4
160-421-09 980 IGNACIO BLVD 160-581-01 2 CLAY CT 160-581-03 2 GRASS CT 160-581-04 7 GRASS CT 160-581-06 46 Clay CT (Grass) 160-581-07 63 CLAY CT 160-581-08 16 CLAY CT 160-581-09 30 CLAY CT 160-581-10 47 CLAY CT 160-581-11 53 CLAY CT 160-581-12 33 CLAY CT 160-581-13 25 CLAY CT 160-581-14 17 CLAY CT 160-581-15 9 CLAY CT 160-581-16 1 CLAY CT 160-611-01 495 IGNACIO BLVD 160-611-02 481 IGNACIO BLVD 160-611-03 475 IGNACIO BLVD	18 4 4 4 4 4 4 4 4 4 4
160-581-01 2 CLAY CT 160-581-03 2 GRASS CT 160-581-04 7 GRASS CT 160-581-06 46 Clay CT (Grass) 160-581-07 63 CLAY CT 160-581-08 16 CLAY CT 160-581-09 30 CLAY CT 160-581-10 47 CLAY CT 160-581-11 53 CLAY CT 160-581-12 33 CLAY CT 160-581-13 25 CLAY CT 160-581-14 17 CLAY CT 160-581-15 9 CLAY CT 160-581-16 1 CLAY CT 160-581-16 1 CLAY CT 160-611-01 495 IGNACIO BLVD 160-611-02 481 IGNACIO BLVD 160-611-03 475 IGNACIO BLVD	4 4 4 4 4 4 4 4 4 4
160-581-03 2 GRASS CT 160-581-04 7 GRASS CT 160-581-06 46 Clay CT (Grass) 160-581-07 63 CLAY CT 160-581-08 16 CLAY CT 160-581-09 30 CLAY CT 160-581-10 47 CLAY CT 160-581-11 53 CLAY CT 160-581-12 33 CLAY CT 160-581-13 25 CLAY CT 160-581-14 17 CLAY CT 160-581-15 9 CLAY CT 160-581-16 1 CLAY CT 160-581-16 1 CLAY CT 160-611-01 495 IGNACIO BLVD 160-611-02 481 IGNACIO BLVD 160-611-03 475 IGNACIO BLVD	4 4 4 4 4 4 4 4 4
160-581-04 7 GRASS CT 160-581-06 46 Clay CT (Grass) 160-581-07 63 CLAY CT 160-581-08 16 CLAY CT 160-581-09 30 CLAY CT 160-581-10 47 CLAY CT 160-581-11 53 CLAY CT 160-581-12 33 CLAY CT 160-581-13 25 CLAY CT 160-581-14 17 CLAY CT 160-581-15 9 CLAY CT 160-581-16 1 CLAY CT 160-581-16 1 CLAY CT 160-611-01 495 IGNACIO BLVD 160-611-02 481 IGNACIO BLVD 160-611-03 475 IGNACIO BLVD	4 4 4 4 4 4 4 4
160-581-06	4 4 4 4 4 4 4
160-581-07 63 CLAY CT 160-581-08 16 CLAY CT 160-581-09 30 CLAY CT 160-581-10 47 CLAY CT 160-581-11 53 CLAY CT 160-581-12 33 CLAY CT 160-581-13 25 CLAY CT 160-581-14 17 CLAY CT 160-581-15 9 CLAY CT 160-581-16 1 CLAY CT 160-581-16 1 CLAY CT 160-611-01 495 IGNACIO BLVD 160-611-02 481 IGNACIO BLVD 160-611-03 475 IGNACIO BLVD	4 4 4 4 4 4 4
160-581-08	4 4 4 4 4 4
160-581-09 30 CLAY CT 160-581-10 47 CLAY CT 160-581-11 53 CLAY CT 160-581-12 33 CLAY CT 160-581-13 25 CLAY CT 160-581-14 17 CLAY CT 160-581-15 9 CLAY CT 160-581-16 1 CLAY CT 160-611-01 495 IGNACIO BLVD 160-611-02 481 IGNACIO BLVD 160-611-03 475 IGNACIO BLVD	4 4 4 4 4
160-581-10 47 CLAY CT 160-581-11 53 CLAY CT 160-581-12 33 CLAY CT 160-581-13 25 CLAY CT 160-581-14 17 CLAY CT 160-581-15 9 CLAY CT 160-581-16 1 CLAY CT 160-611-01 495 IGNACIO BLVD 160-611-02 481 IGNACIO BLVD 160-611-03 475 IGNACIO BLVD 160-611-04 461 IGNACIO BLVD	4 4 4 4
160-581-11 53 CLAY CT 160-581-12 33 CLAY CT 160-581-13 25 CLAY CT 160-581-14 17 CLAY CT 160-581-15 9 CLAY CT 160-581-16 1 CLAY CT 160-611-01 495 IGNACIO BLVD 160-611-02 481 IGNACIO BLVD 160-611-03 475 IGNACIO BLVD	4 4 4
160-581-12 33 CLAY CT 160-581-13 25 CLAY CT 160-581-14 17 CLAY CT 160-581-15 9 CLAY CT 160-581-16 1 CLAY CT 160-611-01 495 IGNACIO BLVD 160-611-02 481 IGNACIO BLVD 160-611-03 475 IGNACIO BLVD 160-611-04 461 IGNACIO BLVD	4 4 4
160-581-13 25 CLAY CT 160-581-14 17 CLAY CT 160-581-15 9 CLAY CT 160-581-16 1 CLAY CT 160-611-01 495 IGNACIO BLVD 160-611-02 481 IGNACIO BLVD 160-611-03 475 IGNACIO BLVD 160-611-04 461 IGNACIO BLVD	4
160-581-14 17 CLAY CT 160-581-15 9 CLAY CT 160-581-16 1 CLAY CT 160-611-01 495 IGNACIO BLVD 160-611-02 481 IGNACIO BLVD 160-611-03 475 IGNACIO BLVD 160-611-04 461 IGNACIO BLVD	4
160-581-15 9 CLAY CT 160-581-16 1 CLAY CT 160-611-01 495 IGNACIO BLVD 160-611-02 481 IGNACIO BLVD 160-611-03 475 IGNACIO BLVD 160-611-04 461 IGNACIO BLVD	
160-581-16 1 CLAY CT 160-611-01 495 IGNACIO BLVD 160-611-02 481 IGNACIO BLVD 160-611-03 475 IGNACIO BLVD 160-611-04 461 IGNACIO BLVD	4
160-611-01 495 IGNACIO BLVD 160-611-02 481 IGNACIO BLVD 160-611-03 475 IGNACIO BLVD 160-611-04 461 IGNACIO BLVD	
160-611-02	4
160-611-03 475 IGNACIO BLVD 160-611-04 461 IGNACIO BLVD	20
160-611-04 461 IGNACIO BLVD	16
	20
160-611-05 445 IGNACIO BLVD	10
	20
160-611-06 415 IGNACIO BLVD	15
160-611-07 401 IGNACIO BLVD	10
160-611-08 531 ALAMEDA DEL PRADO	10
160-611-09 521 ALAMEDA DEL PRADO	20
160-611-10 511 ALAMEDA DEL PRADO	10
160-611-11 501 ALAMEDA DEL PRADO	8
160-611-12 551 ALAMEDA DEL PRADO	10
160-611-13 541 ALAMEDA DEL PRADO	20
160-161-21 250 ENTRADA DR	70
125-180-34 8141 REDWOOD BLVD	56
157-710-02 1400 N HAMILTON PRKWY 1	36
160-480-30 215 ALAMEDA DEL PRADO 1	05
160-302-35 275 ALAMEDA DEL PRADO	47
143-160-20 7600 REDWOOD BLVD	
141-303-06 935 FRONT /7299 REDWOOD	55

Appendix C

NFPD List of Sprinklered Occupancies

						Excluded
Address	Suite	Business Name	Five Year Test Date	Central Station Monitoring Req?	Next Insp Date	Schedule?
		Bay Vista Apartments @ Meadow Park				
						Ē
1847 Marion Ave		SFD				
11 PORTSMOUTH DR.		SFD		1		100
1049 4TH ST.		SFD		H		H
	#A		014.470040	H		[
150 ALAMEDA DEL PRADO 1164		VACANT	8/14/2013	tool		had
201 ALAMEDA DEL PRADO		VACANT	9/19/2017	~		
Bldg, Vacant- 5yr is sch	eduled for nex		3/13/2017	90		tool
215 ALAMEDA DEL PRADO	Service for they	Best Wetsern Novato Oaks Inn	6/12/2014		1/1/2013	
1136						7100
225 ALAMEDA DEL PRADO		WILD FOX RESTAURANT	6/20/2011			
7/6/11: Inspection comp	leted. Waiting	g for report. GF				
21 ALPINE RD.		SFD				
2 Andersen Wy	Lot 3	SFD				
Anderson Wy	Lot 4	SFD				
45 ANDREAS CIR.		SFD				
570 Arlington Rd		Roggenbuck Residence				
700 ARLINGTON CIR.		SFD				
625 ARTHUR ST		NOVATO HIGH SCHOOL GYM	7/28/2015			
2397						
10 Ash Ct	Lot 292	SFD				
13 Ash Ct	Lot 297	SFD				
14 Ash Ct	Lot 293	SFD				
18 Ash Ct	Lot 294	SFD				
2 Ash Ct	Lot 291	SFD				
6 Ash Ct	Lot 290	SFD				
9 Ash Ct	Lot 296	SFD				
450 ATHERTON AV		NFPD STATION #2	9/5/2010			
723 Atherton Ave		SFD				
10 AUDOBON WAY		SFD				
14 AUDOBON WAY		SFD				
18 AUDOBON WAY		SFD				
22 AUDOBON WAY		SFD				
23 AUDOBON WAY		SFD				
27 AUDOBON WY		SFD				
31 AUDOBON WAY		SFD				
35 AUDOBON WY		SFD				
38 AUDOBON WAY		SFD				
42 AUDOBON WAY		SFD				
43 AUDOBON WAY		SFD				
47 AUDOBON WAY		SFD				
6 Autumn Ct		SFD				
11 AVOCET CT.	LOT 5	SFD				
3 AVOCET CT.	LOT 3	SFD				

Page 1 of 48

Address	Suite	Business Name	Five Year Test Date	Central Station Monitoring Reg?	Excluded Next from Insp Date Schedule?
7 AVOCET CT.	107.4	050		monating req.	- Contraction
	LOT 4	SFD			L.J.
11 AZALEA PL.		SFD		[)	
12 AZALEA PL.		SFD			land pro-
16 AZALEA PL.		SFD		-	님
3 AZALEA PL.		SFD			Ц
4 AZALEA PL.		SFD			
7 AZALEA PL.		SFD			
8 AZALEA PL.		SFD			1
5 Badger Ct		SFD		~	
2764					-
20 Baywood Cir		Whiteside Residence			
2848					
7 BEAR CREEK RD		SFD			LJ
1075 Bel Marin Keys Blvd.		SFD			L., l
171 BEL MARIN KEYS BL		MARIN HUMANE SOCIETY (SHELTER)	6/8/2015	₹	
	ED DUE	TO DEFICIENCIES. LETTER MAILED.	GF 4/30/10		
171 BEL MARIN KEYS BL		MARIN HUMANE SOCIETY (ED CTR/WHITTEL BLDG)	2/22/2010		
INSPECTION 3/28/10. FAIL	ED DUE	TO DEFICIENCIES. LETTER MAILED.	GF 4/30/10		
250 BEL MARIN KEYS BL	A-2	CRITTENDEN			
250 BEL MARIN KEYS BL	F-3	WILLIAM R. CAMERON, C.P.A.			
250 BEL MARIN KEYS BL	F-2	MARK B. CREED, III C.L.U.			
250 BEL MARIN KEYS BL	F-200	THE CONSOLIDATED COMPANIES			
250 BEL MARIN KEYS BL	G	BUILDING SHELL-Bidg G	7/18/2012		
Building "B, C, D, E" are no	t sprinkled	f. Building A, F and G have sprinklers.			
250 BEL MARIN KEYS BL	A-1	REPUBLIC ELECTRIC			
250 BEL MARIN KEYS BL	G-2	COLLATERAL SPECIALISTS INC			
250 Bel Marin Keys BL	F	BUILDING SHELL-Bldg, F	4/13/2018		
250 Bel Marin Keys BL	A	BUILDING SHELL-Bidg A			
250 BEL MARIN KEYS BL	G-3	RENAISSANCE			
265 BEL MARIN KEYS BL		Marin Bikes/265 Bel Marin Keys	3/1/2005	✓	
storage issue-waiting for Doi regarding progress. LM with placed on riser. Deficiences Don Dammen has paperwro	Damme Janice 3/ corrected	e been corrected per Bob. Need ASTI to n to inspect? 5/23/06 Jim G. left copy wit 15/06 for Robert-need letter that states of 17/19/07 Don Dammon has paper work to forward when done DO NOT SEND LET	h office staff, f orrection have or 5 yr fest. Sp	Mr. Buckley will call been made and tag ok with janice martin GF	Lori
275 BEL MARIN KEYS BLVD.		275 BMK LLC		~	L.,
4435				100	
300 Bel Marin Keys BL		BIO MARIN PHARMACEUTICAL	5/25/2015	✓	
Building Sold to Bob Miller 7.	2006				
371 Bel Marin Keys BL		BUILDING SHELL	10/12/2012		
371 BEL MARIN KEYS BL	220	MEDICAL BOARD OF CALIFORNIA			
371 BEL MARIN KEYS BL	200	PIAZZA TRADING CO., LTD.			
2094					
371 BEL MARIN KEYS BL	120	COMPUTEREASE			
371 BEL MARIN KEYS BL	110, 230	BELL MARIN			
371 BEL MARIN KEYS BL	100	DATA PROCESSING/ MARIN COUNTY			
371 BEL MARIN KEYS BL	210, 210	ADVANCED THERAPIES, INC			
378 BEL MARIN KEYS BL		MARIN BIOLOGIC LABORATORIES, INC		2	
384 BEL MARIN KEYS BL 5 yr. cert rec'd 1/27/09. GF		BUILDING SHELL	11/17/2013		

Address	Suite	Business Name	Five Year Test Date	Central Station Monitoring Req?	Excluded Next from Insp Date Schedule?
390 BEL MARIN KEYS BL		BUILDING SHELL	9/11/2017		П
394 BEL MARIN KEYS BL 2668		BUILDING SHELL	10/25/2015		
396 BEL MARIN KEYS BL 1250		ARAMARK UNIFORM SERVICES	3/1/2007		
400 BEL MARIN KEYS BL		BUILDING SHELL			£7
400 BEL MARIN KEYS BL		DRIVESAVERS	2/11/2018	m	
425 Bel Marin Keys Blvd.		EMPIRE MINI STORAGE	5/12/2014	✓	
3756					FITTER
8001 BINFORD RD		CAGWIN & DORWARD			
8121 BINFORD RD		CERVANTES STORAGE			
8127 BINFORD RD		SELF STORAGE	7/24/2017		ā
8141 BINFORD RD		SELF STORAGE	3/22/2016		
8190 Binford Rd		Storage Facility		⊘	
2744					-
271 Bolling Cir	Lot 324	SFD		3	
333 Bolling Cir	Lot 334	VALENCIA DAY CARE			
351 Bolling Cir	Lot 336	SFD			ā
364 Bolling Cir	Lot 306	SFD			
366 Bolling Cir	Lot 305	SFD			
371 Bolling Cir	Lot 341	SFD			
373 Bolling Cir	Lot 342	SFD			
382 Bolling Cir	Lot 303	SFD			
384 Bolling Cir	Lot 302	SFD			
386 Bolling Cir	Lot 301	SFD			
391 Bolling Cir	Lot 343	SFD			
393 Bolling Cir	Lot 344	SFD			
402 Bolling Cir	Lot 300	SFD			
404 Bolling Cir	Lot 299	SFD			
411 Bolling Cir	Lot 345	SFD			
413 Balling Cir	Lot 346	SFD			
422 Balling Cir	Lot 297	SFD			
424 Balling Cir	Lot 296	SFD			
426 Bolling Cir		SFD		닏	
431 Balling Cir	Lot 347				
433 Bolling Cir		SFD		닏	
435 Bolling Cir	Lot 349	SFD		Li	
437 Bolling Cir	Lot 350				
442 Bolling Cir	Lat 294			H	
444 Bolling Cir	Lot 293			land cond	
451 Bolling Cir	Lot 351			L	
453 Bolling Cir	Lot 352			-	2
455 Bolling Cir	Lot 353			님	
462 Bolling Cir	Lot 292			님	
464 Bolling Cir		SFD			<u> </u>
471 Bolling Cir		SFD			
473 Bolling Cir	Lot 355				
475 Boiling Cir		SFD			
482 Bolling Cir		SFD		님	
484 Bolling Cir	Lot 289				
491 Bolling Cir		SFD		H	
493 Balling Cir	Lot 358	SED		house	L

Page 3 of 48

Address	Suite	Business Name	Five Year Test Date	Central Station Monitoring Req?	Next Insp Date	Excluded from Schedule?
495 Bolling Cir	Lot 359	SFD				
5 Bolling Dr		NFPD Station 5	9/5/2010	~		
502 Bolling Cir	Lot 288		51012010	ō		Ö
504 Bolling Cir	Lot 287	SFD				
511 Bolling Cir	Lot 360					
513 Bolling Cir	Lot 361			Ō		ñ
515 Bolling Cir		T		ŏ		
522 Bolling Cir	Lat 283					m
524 Bolling Cir	Lot 284	SFD				
526 Bolling Cir		SFD		H		H
528 Bolling Cir	Lot 286	SFD				H
531 Bolling Cir		SFD		ä		H
533 Bolling Cir	Lot 364	SFD		ă		H
535 Bolling Cir		SFD		H		H
537 Bolling Cir	Lot 366	SFD				F
-		SFD		H		
542 Bolling Cir 544 Bolling Cir		SFD				Li
546 Bolling Cir		SFD		ij		H
-		SFD		ä		m
551 Bolling Cir 553 Bolling Cir		SFD		H		H
•		SFD				in in
562 Bolling Cir				577		
564 Bolling Cir		SFD		H		ద
566 Bolling Cir	Lot 278 Lot 369	SFD SFD		H		had proj
571 Bolling Cir				m		
573 Bolling Cir		SFD		H		
582 Bolling Cir	Lot 275					
584 Bolling Cir		SFD		ä		
586 Bolling Cir	Lot 273			H		H
591 BOLLING CIR 593 BOLLING CIR		SFD SFD				
602 Balling Circle	Lot 263			H		Ħ
				岩		
604 Bolling Circle		SFD		Ħ		d
606 Bolling Circle		SFD		Li		
608 Bolling Circle	Lot 260			1		ö
611 BOLLING CIR		SFD		-		H
613 BOLLING CIR		SFD		드		H
622 Bolling Circle	Lot 264			님		
624 Bolling Circle	Lot 265			H		
631 BOLLING CIR		SFD				
633 BOLLING CIR		SFD		님		
642 Bolling Circle	Lot 266			h-1		
644 Bolling Circle	Lot 267	SFD		Land Complete		
651 BOLLING CIR		SFD		님		
653 BOLLING CIR		SFD		H		
662 Bolling Circle	Lot 268			님		
664 Bolling Circle		SFD				
656 Bolling Circle	Lot 270			in a		
682 Bolling Circle		SFD		님		님
684 Balling Circle	Lot 272			H		님
911 BOLLING CIR		SFD		브		-
913 BOLLING CIR		SFD		land professional		
931 BOLLING CIR.		SFD		L_ř		

Page 4 of 48

Address	Suite	Business Name	Five Year Test Date	Central Station Monitoring Req?	Next Insp Date	Excluded from Schedule?
933 BOLLING CIR		SFD		0		
951 BOLLING DR.		SFD				
953 BOLLING CIR		SFD				
955 BOLLING CIR		SFD				
971 BOLLING CIR.		SFD		Ö		ñ
973 BOLLING CIR.		SFD		ñ		ñ
18 BONNIE BRAE DR		SFD		ñ		m
5 BORGES CT		SFD		[T]		Ħ
65 BRICHWOOD DR.		WILSON/BURNS RESIDENCE		Ħ		H
61 Broadmoor Ct		SFD		✓		=
11 BROOKLINE DR.		SFD				
12 BROOKLINE DR.		SFD		H		m
15 BROOKLINE DR.		SFD		H		H
						H
16 BROOKLINE DR.		SFD SFD				L)
19 BROOKLINE DR.				H		H
23 BROOKLINE DR.		SFD		m		rm.
27 BROOKLINE DR.		SFD				H
28 BROOKLINE DR.		SFD		닖		
31 BROOKLINE DR.		SFD		P. C.		
32 BROOKLINE DR.		SFD				닖
35 BROOKLINE DR.		SFD				
36 BROOKLINE DR.		SFD				
39 BROOKLINE DR		SFD		L.,		
4 BROOKLINE DR.		SFD				
40 BROOKLINE DR.		SFD				
43 BROOKLINE DR.		SFD				
44 BROOKLINE DR.		SFD				
47 BROOKLINE DR.		SFD				
48 BROOKLINE DR.		SFD				
51 BROOKLINE DR.		SFD				
8 BROOKLINE DR		VALENTINA & YURI BYCHKOV		(1)	1/1/2011	
6 Brown Dr		CEDARS BROWN HOUSE	2/5/2007		10/1/2010	
100 Bryan Dr		SFD				
15 Bryan Dr	Lot 7	SFD				
19 Bryan Dr	Lot 8	SFD				
932 C ST		NORTH BAY CHILDREN'S CENTER		✓	1/1/2012	
1100 CABRO RIDGE		SFD		П		
600 CANYON RD.		SFD		ñ		Ħ
646 CANYON RD		DEER PARK RETIREMENT	10/14/2015		1/1/2013	ā
871		DEE! THE THE THE THE	1011472010	hatti'	17 172010	1.07
655 CANYON RD		CANYON MANOR	7/30/2014			
2419		Water and ministers	7700/2014	LI		L
17 Capilano Ave		SFD				П
102 CAPTAIN NURSE CIR		SFD		Ħ		H
104 CAPTAIN NURSE CIR		SFD		m		Ö
106 CAPTAIN NURSE CIR		SDF		H		H
	1-1-000					ă
11 Captain Nurse Circle	Lat 238					
111 CAPTAIN NURSE CIR		SFD				님
113 CAPTAIN NURSE CIR		SFD		1		L
115 CAPTAIN NURSE CIR		SFD				H
117 CAPTAIN NURSE CIR		SFD		Li		
122 CAPTAIN NURSE CIR		SFD		prosp.		

Page 5 of 48

Address	Suite Business Name	Five Year Test Date	Central Station Monitoring Req?	Excluded Next from Insp Date Schedule?
124 CAPTAIN NURSE CIR	SFD			
13 Captain Nurse Circle	Lot 327 SFD		Ĭ	
131 CAPTAIN NURSE CIR	SFD			
133 CAPTAIN NURSE CIR	SFD		m	Ö
142 CAPTAIN NURSE CIR	SFD			
144 CAPTAIN NURSE CIR	SFD			
146 CAPTAIN NURSE CIR	SFD			
151 CAPTAIN NURSE CIR	SFD		Õ	
153 CAPTAIN NURSE CIR	SFD			
162 CAPTAIN NURSE CIR	SFD			
164 CAPTAIN NURSE CIR	SFD			
166 CAPTAIN NURSE CIR	SFD			
171 CAPTAIN NURSE CIR	SFD			
173 CAPTAIN NURSE CIR	SFD			
175 CAPTAIN NURSE CIR	SFD			
182 CAPTAIN NURSE CIR	SFD			
184 CAPTAIN NURSE CIR	SFD			
191 CAPTAIN NURSE CIR	SFD			
193 CAPTAIN NURSE CIR	SFD			
202 CAPTAIN NURSE CIR	SFD			
204 CAPTAIN NURSE CIR	SFD			
206 CAPTAIN NURSE CIR	SFD		-	
211 CAPTAIN NURSE CIR	SFD			
213 CAPTAIN NURSE CIR	SFD			
215 CAPTAIN NURSE CIR	SFD			Ü
217 CAPTAIN NURSE CIR	SDF			
22 CAPTAIN NURSE CIR	SFD			
222 CAPTAIN NURSE CIR	SFD			
224 CAPTAIN NURSE CIR	SFD			
226 CAPTAIN NURSE CIR	SFD			
228 CAPTAIN NURSE CIR	SFD			
231 CAPTAIN NURSE CIR	SFD			
233 CAPTAIN NURSE CIR	SFD			
235 CAPTAIN NURSE CIR	SFD			
24 CAPTAIN NURSE CIR	SFD			
242 CAPTAIN NURSE CIR	SFD			
244 CAPTAIN NURSE CIR	SFD			
251 CAPTAIN NURSE CIR	SFD			
253 CAPTAIN NURSE CIR	SFD			
255 CAPTAIN NURSE CIR	SFD			
262 CAPTAIN NURSE CIR	SFD			
264 CAPTAIN NURSE CIR	SFD			-
271 CAPTAIN NURSE CIR	SFD			
273 CAPTAIN NURSE CIR	SFD		핕	닏
275 CAPTAIN NURSE CIR	SFD		ᆜ	
282 CAPTAIN NURSE CIR	SFD			
284 CAPTAIN NURSE CIR	SFD		0009	
286 CAPTAIN NURSE CIR	SFD			닏
288 CAPTAIN NURSE CIR	SFD			날
302 CAPTAIN NURSE CIR	SFD		님	닐
304 CAPTAIN NURSE CIR	SFD		Land	<u>La</u>
306 CAPTAIN NURSE CIR	SFD		Ш	L

Page 6 of 48

Address	Suite	Business Name	Five Year Test Date	Central Station Monitoring Req?	Next Insp Date	Excluded from Schedule?
308 CAPTAIN NURSE CIR		SFD				П
31 Captain Nurse Circle	Lot 236			ā		Ĭ
322 CAPTAIN NURSE CIR	201 200	SFD		m		Ħ
324 CAPTAIN NURSE CIR		SFD		Ħ		Ħ
326 CAPTAIN NURSE CIR		SFD		ři		H
328 CAPTAIN NURSE CIR		SFD		ñ		Ä
33 Captain Nurse Circle	Lot 235			level		m
2887	LU(230	3-6		2mml		
342 CAPTAIN NURSE CIR		SFD				m
344 CAPTAIN NURSE CIR		SFD		m		
346 CAPTAIN NURSE CIR		SFD		Ħ		H
348 CAPTAIN NURSE CIR		SFD		- F		
362 CAPTAIN NURSE CIR		SFD		m		
364 CAPTAIN NURSE CIR		SFD		Ħ		Ħ
366 CAPTAIN NURSE CIR		SFD		n		m
368 CAPTAIN NURSE CIR		SFD		П		Ħ
382 CAPTAIN NURSE CIR		SFD		H		B
384 CAPTAIN NURSE CIR		SFD		H		H
386 Captain Nurse Circle	Lat 200			m		m
42 CAPTAIN NURSE CIR	LOC 200	SFD		H		H
44 CAPTAIN NURSE CIR		SFD				m
46 CAPTAIN NURSE CIR		SFD				H
	1 -+ 224			H		had proj
51 Captain Nurse Circle	Lot 234			177		
53 Captain Nurse Circle	Lot 233			-		in the second
55 Captain Nurse Circle	Lot 232			岩		ä
62 CAPTAIN NURSE CIR		SFD		H		H
64 CAPTAIN NURSE CIR		SFD		ind end		
82 CAPTAIN NURSE CIR		SFD				H
88 CAPTAIN NURSE CIR		SFD		m		ii
91 CAPTAIN NURSE CIR		SFD		had proj		
93 CAPTAIN NURSE CIR		SFD		H		
95 CAPTAIN NURSE CIR		SFD		<u></u>		L.i
104 CARIBE ISLE		SFD				H
23 CARNOUSTIE DR.		SFD		님		M
2056 CAROLYN WAY		SFD				
4963						
23 CASUAL CT		SFD		Li		
1530 CENTER RD		BUILDING SHELL	7/1/2007	LJ		
770				F-4		prog
1530 CENTER RD	12	NAUTILUS OF MARIN	7/1/2007			님
1540 CENTER RD		CENTER PLACE CONDOS	4/1/2007		1/1/2011	
872						-
1542 CENTER RD		CENTER PLACE CONDOS	4/1/2007		1/1/2011	
1548 CENTER RD		CENTER PLACE CONDOS	4/1/2007		1/1/2013	L
1550 CENTER RD		CENTER PLACE CONDOS	4/1/2007		1/1/2013	
1552 CENTER RD		CENTER PLACE CONDOS	4/1/2007	100	1/1/2013	
1556 CENTER RD		CENTER PLACE CONDOS	4/1/2007		1/1/2012	
1558 CENTER RD		CENTER PLACE CONDOS	4/1/2007	100	1/1/2011	8
1674 CENTER RD.		SFD				
1705 CENTER RD		SFD (WAS SUNDANCE VILLA)				
1832 CENTER RD		SFD		니		
1846 Center Rd		Idell Residence				

Page 7 of 48

Address	Suite	Business Name	Five Year Test Date	Central Station Monitoring Req?	Next Insp Date	Excluded from Schedule?
1855 Center Rd		SFD				
2030 Center Road		Kostov Residence				
2205 CENTER RD.		SFD				
2219 Center Rd		SFD				
2469 CENTER RD.		SFD		ñ		m
2524 CENTER RD		SFD		=======================================		
150 Chamberlain Ave		SFD				
2 CHAMBERLAIN CT.		SFD		ä		
53 CHAMBERLAIN AVE.		SFD				
61 CHAMBERLAIN AVE.		SFD				n
275 Channel Dr		SFD				
101 CHAPEL HILL RD.		SED				-
102 CHAPEL HILL RD.		SFD				-
105 CHAPEL HILL RD.		SFD				ã
108 CHAPEL HILL RD.		SFD				Ħ
112 CHAPEL HILL RD.		SFD		F		m
113 CHAPEL HILL RD.		SFD		177		-
117 CHAPEL HILL RD		SFD		H		
121 CHAPEL HILL RD.		SFD		m		ă
129 CHAPEL HILL RD		SFD				
132 CHAPEL HILL RD.		SFD		m		
133 CHAPEL HILL RD.		SFD		F		H
136 CHAPEL HILL RD.		SFD		ñ		Ö
137 CHAPEL HILL RD.		SFD		H		H
140 CHAPEL HILL RD.		SFD		Ħ		Ħ
141 CHAPEL HILL RD		SFD		m		ä
144 CHAPEL HILL RD.		SFD		H		
145 CHAPEL HILL RD.		SFD		177		-
149 CHAPEL HILL RD.		SFD		<u>-</u>		
1208 CHASE ST		SFD		n		Ö
1407 CHASE ST.		SFD		H		
10 CHERRY HILL LN.		TOWNHOUSE - SED		Ħ		
11 CHERRY HILL LN.		TOWNHOUSE - SFD		177		
15 CHERRY HILL LN.		TOWNHOUSE - SFD				Ħ
19 CHERRY HILL LN.		TOWNHOUSE - SFD		ñ		
20 CHERRY HILL LN.		TOWNHOUSE - SFD				ä
23 CHERRY HILL LN.		TOWNHOUSE- SFD				Ĭ
114 Chesapeake Lane	Lot 99	SFD		H		H
115 Chesapeake Lane	Lot 62	SFD		H		B
118 Chesapeake Lane	Lot 98	SFD		H		Ö
119 Chesapeake Lane	Lot 61	SFD		H		F
122 Chesapeake Lane	Lot 97	SFD		ŏ		
123 Chesapeake Lane	Lot 60	SFD		H		H
126 Chesapeake Lane	Lot 96	SFD		-		H
130 Chesapeake Lane	Lot 95	SFD		H		
134 Chesapeake Lane	LUI 95	CHERISHED CARE HOME		177		had [17]
138 Chesapeake Lane	Lot 93	SFD		H		H
136 Chesapeake Lane 142 Chesapeake Lane	Lot 93 Lot 92	SFD				
142 Chesapeake Lane 143 Chesapeake Lane	Lot 92 Lot 36	SFD		5-w)		
	Lot 91	SFD				H
146 Chesapeake Lane 147 Chesapeake Lane	Lot 91 Lot 35	SFD		in a		ä
150 Chesapeake Lane	Lot 90	SFD		Ħ		Ħ
roo onesapeake cane	Cot an	oru.				L

Page 8 of 48

Address	Suite	Business Name	Five Year Test Date	Central Station Monitoring Req?	Next Insp Date	Excluded from Schedule?	
151 Chesapeake Lane	Lat 34	SFD					
154 Chesapeake Lane	Lot 89	SFD		H			
158 Chesapeake Lane	Lot 88	SFD		H		H	
100 CIELO LANE	LUI 00	CROOKED OAK at LOMA VERDE	3/29/2015	1-77	1/1/2013	H	
2127		PRESERVE	3/28/2015		1/1/2013	lored	
105 CIELO LANE		CROOKED OAK at LOMA VERDE	3/29/2015	m	4440040		
2128		PRESERVE	3/29/2015	LJ	1/1/2013	L.J	
110 CIELO LANE		CROOKED OAK at LOMA VERDE	3/29/2015	\Box	1/1/2013	P=9	
		PRESERVE		27			
115 CIELO LANE		CROOKED OAK at LOMA VERDE PRESERVE	3/29/2015	-	1/1/2013	LJ	
120 CIELO LANE		CROOKED OAK at LOMA VERDE PRESERVE	3/29/2015		1/1/2013		
125 CIELO LANE		CROOKED OAK at LOMA VERDE PRESERVE	3/29/2015		1/1/2013		
130 CIELO LANE		CROOKED OAK at LOMA VERDE PRESERVE	3/29/2015		1/1/2013		
135 CIELO LANE		CROOKED OAK at LOMA VERDE PRESERVE	3/29/2015		1/1/2013		
145 CIELO LANE		CROOKED OAK at LOMA VERDE PRESERVE	3/29/2015		1/1/2013		
202 CLUB DR.		SFD					
205 Club Dr	Lot 1B	SFD					
213 Club Dr	Lot 16	SFD					
225 Club Dr	Lot 13	SFD				ñ	
120 COBBLESTONE CT.	202	SFD		m		m	
B7 COBBLESTONE CT.		SED		Ħ		m	
10 COMMERCIAL BL	108 208	Q & A RESEARCH		m		H	
10 COMMERCIAL BL		CALTRANS CONSTRUCTION OFFICE		H		Ħ	
10 COMMERCIAL BL	100,02,0	BUILDING SHELL	8/18/2011	m		H	
9/23/11: REPORT REC'D. F	AILED D		0/10/2011			LJ	
10 COMMERCIAL BL	216	GUARDSMARK				rm	
15 COMMERCIAL BL	15-17	PACIFIC POLYTECH INC	444000044			H	
672	19-17	PACIFIC POLYTECH INC	11/10/2014	L.,.)		1	
37 COMMERCIAL BL		BUILDING SHELL	5/1/2007				
10/7/08: 37 COMMERCIAL E		EC'D LETTER AND ARE CHECKING TO DULE AND LET US KNOW THE DATE O	SEE IF INSP		N		
9 COMMERCIAL BL		BUILDING SHELL	11/6/2017				
652							
8 CONCHITA CT.		SFD					
1 CORINTHIAN CT		BUILDING SHELL	7/9/2014				
2415							
500 Country Club Dr		Marin Country Club	11/30/2013	✓			
2781							
2 Courtney Wy	Lot 1	\$FD					
9 COURTNEY WAY		SFD					
5 Courtney Way Lot	4	Somerston Heights					
10 CREEKVIEW CT.	Lot 341	SFD					
11 CREEKVIEW CT.	Lot 335	SFD					
14 CREEKVIEW CT.	Lot 340	SFD					
				(m)			
15 CREEKVIEW CT.		SFD				L.,	
15 CREEKVIEW CT. 18 CREEKVIEW CT.		SFD SFD		H			

Page 9 of 48

Δri	dress	Suite	Business Name	Five Year Test Date	Central Station Monitoring Reg?	Next Insp Date	Excluded from Schedule?	
				100,000	ind indiana	map cate		
	CREEKVIEW CT.	Lot 343						
	CREEKVIEW CT.	1 -4 200	SFD		m		片	
	CREEKVIEW CT.	Lot 333			H		H	
	CREEKVIEW CT.	Lot 342			had bad		11	
	CREEKVIEW CT.	Lot 334			-		Η	
	A CRISSY PL.		SFD		i.d		Li	
	B CRISSY PL.		SFD		H		LJ	
	CRISSY PL.		SFD		ind m		님	
	CRISSY PL.		SFD		H			
	A CRISSY PL.		SFD		lund proj		100	
	B CRISSY PL.		SFD		님			
	C CRISSY PL.		\$FD		Lad cm		L	
	D CRISSY PL.		SFD		띰		님	
	CRISSY PL.		\$FD		닖		L.J	
	CRISSY PL.		SFD				님	
	CRISSY PL		SFD		실			
	CRISSY PL.		SFD				land one	
	CRISSY PL.		SFD		닖		님	
	CRISSY PL.		SFD				1	
-	CRISSY PL.		SFD		J			
	CRISSY PL.		SFD		닏		님	
	CRISSY PL.		SFD		占		(00)	
	CRISSY PL.		SFD				님	
	CRISSY PL.		SFD					
	CRISSY PL.		SFD		1			
	CRISSY PL.		SFD		-			
-	CRISSY PL.		SFD		100			
	CRISSY PL.		SFD				닏	
	10 DAWES ST.		SFD				L!	
	De Long Ave		GATEWAY OFFICE BLDG (WAS 1 ADIRENNE ST.)		₩.		LJ	
790	DE LONG AVE.		WHOLE FOODS	1/27/2016	×		L	
	fir zone 1 sect. A&B see con inspection 5th & 6th floors-zo Field inspection 3rd floor zon test-4th filor-zone 2A & 2B s comments dated 1/6/09. Si see comments dated 1/27/0 Underground Inspection	nmts date one #1 se ne 1A & 18 ee comme te inspect 9 DW	or pages 37 &38 see commts dated 9/15 d 10/8/08. D.Dammen Site insp 4th fir Se ctions A & B Delong Ave mixed use see 8 see comments dated 11/12/08. D.Dam ents dated 11/25/08. Site Inspection D. D ion D. Demmen for fire sprinkler system	ect A & B 10/2 comments da imen Field ins pammen 3rd F 5th floor zone	t/08. D. Dammen s ted 11/3/08. D.Dami paction & witness hy loor-Zone 4 see #3 and 6th floor zon	ite men ydro ne #3		
	Underground plans were sut comments dated 11/08/08. Combined system standpipe		h the overhead plans. D.Dammen field i n: 2/18/09. D. Dammen	nspection-und	erground fire service	e see		
816	DE LONG AVE.		NOVATO HISTORICAL MUSEUM	3/18/2013				
10	DEER ISLAND LN.		SFD					
695	DELONG AV		BUILDING SHELL	4/1/2005	₩ .			
	PASSED AWAY. SHE DOE HER THAT RISER SHOULD COMPLETED. FAX HER LI	S NOT KI HAVE A STING OF	SANSONE THAT BLDG. WAS OWNED NOW IF HE HAD INSPECTION COMPLI TAG ON IT FROM THE LAST INSPECT INSPECTION COMPANIES.	ETED OR NO	T. GF EXPLAINED	TO		
701	DELONG AV 96	Α	Color-Design Group, Inc					
	50							

Page 10 of 48

Address		Suite	Business Name	Five Year Test Date	Central Station Monitoring Req?	Excluded Next from Insp Date Schedule?
701 DeLong Ave			Sun Iron Works, Ralph Pelto personal storage			
701 DeLong Ave	3678 3679	ı	Anello Painting			
701 Delong Ave	3677	Ē	Pelto			
701 DELONG AV	2015	J	SPOTLIGHT PUBLISHING			
701 DELONG AVE	2016	к	OFFICE/COMMERCIAL BUILDING			
701 DELONG AV	2014	н	INVESTMENT PROPERTY CAPITAL			
701 DELONG AV	2013	G	FIBERGLASS REP			
701 DELONG AV	2012	D B	MARCOCO			ш
701 Delong Ave	2011	Б	SCHNEIDER PEST CONTROL Delong Industrial Park Building Shell	8/1/2011	No.	
	RE TECHNOLO	OGIES TO	COMPLETE INSPECTION WITHIN THE CHIPOTLE MEXICAN GRILL			
806 DIABLO AVE.	4402		NOVATO SENIOR HOUSING		V	
852 Diablo Ave 859 DIABLO AV		С	Edgewater Condominiums of Novato BROWNE, FILLMAN & GOLDIE- MARCU			
859 DIABLO AV 859 DIABLO AV		A D	DICK TONNEMACHER VACANT			
859 DIABLO AVE 859 DIABLO AV		В	BUILDING SHELL JOHN FRANCZAK	3/7/2018		ā
900 DIABLO AV	885		SAFEWAY #979	9/15/2013		
910 DIABLO AV	886		RITE AID #5963	5/2/2011		
912 DIABLO AV 915 DIABLO AV 918 DIABLO AV 928 DIABLO AVE. 934 DIABLO AVE		918-946	PET FOOD EXPRESS FRANK HOWARD ALLEN BUILDING SHELL(Stes. 910-946) DOLLAR TREE SUBWAY 44033	2/1/2007 6/9/2014 2/1/2007		
975 DIABLO AVE	2723	100	PANDA EXPRESS #2136		\mathbf{z}	
105 Digital Dr 15 DIGITAL DR. 16 DIGITAL DR	5200	100	Bio Marin Pharmaceutical W. BRADLEY ELECTRIC OKIZU FOUNDATION	2/25/2014	Z Z	
	due to deficie		tter sent. GF 1/26/09. GOLDEN BEAR TRAVEL	1/30/2014		
42 DIGITAL DR	740		BUILDING SHELL	9/23/2013		
46 DIGITAL DR	1601 2680		BUILDING SHELL	9/23/2013		

Page 11 of 48

Address	Si	uite	Business Name	Five Year Test Date	Central Station Monitoring Req?	Next Insp Date	Excluded from Schedule?
51 Digital Dr			Biosearch Technologies, Inc.	8/15/2017			
	4285		g,				
64 DIGITAL DR			Q & A Research	11/4/2016			
	745						
70 DIGITAL DR	E		CAL-STAR GYMNASTIC				
	4022						
70 DIGITAL DR	A	- G	CAL CUSTOM CONSTRUCTION	6/15/2015	=		
	1831						
73 DIGITAL DR			BIO MARIN	3/22/2010	✓		
5/20/10: Sprin	nkler system falled	due to	deficiencies. Letter mailed. GF				
74 DIGITAL DR			BUILDING SHELL	6/26/2014			
	2674						
75 DIGITAL DR			BUILDING SHELL	2/11/2015			
5 YR. INSPE	CTION SCHEDUL	ED FO	R END OF APRIL W/ ASTI. GF 3/25/10				
77 DIGITAL DR			DOROTHY KUHN, C.P.A.	2/11/2015			
Recalled sprin	nkler heads. Work	should	i be done Jan/Feb 2007.				
77 DIGITAL DR			MRS. GROSSMAN'S PAPER	2/11/2015			
Recalled sprin	nkler heads. Work	should	f be done Jan/Feb 2007.				
79 DIGITAL DR			Bio Marin Pharmaceutical	7/28/2015			
	746						
8 DIGITAL DR			BUILDING SHELL	1/30/2014			
	1908						
81 DIGITAL DR			Biosearch Technologies	2/12/2015			
	747						
90 DIGITAL DR			Bio Marin Pharmaceutical	3/18/2010			
	1907						
95 Digital Dr			BIO MARIN	2/25/2014	✓		
D Dammon P	Non&Calc review o	eae m				t floor	6.23
column 1-3/A see commts o	k-D fire sprkler sys. dated 1/9/09. Site i Site inspection 1st	See cl	mmts dated 10/21/08. See Rev. dated 11 ommts dated 12/8/08 D. Dammen site in tion D.Dammen 1st floor Columns 1-3/A_1 emaining area see comments dated 1/21/1 SFD	/26/08 D. Da sp. For 1st F O see comm	mmen site inspt. 1s ir-columns 6 to 7/B.		
column 1-3/A see commts o D.Dammen S 10 DONNELLY CT.	N-D fire sprkler sys. dated 1/9/09. Site i Site inspection 1st Lo	See o inspect floor re	mmts dated 10/21/08. See Rev. dated 11 ommts dated 12/8/08 D. Dammen site in tion D.Dammen 1st floor Columns 1-3/A_i emaining area see comments dated 1/21/	/26/08 D. Da sp. For 1st F O see comm	mmen site inspt. 1s ir-columns 6 to 7/B.		
column 1-3/A see commts o D.Dammen S 10 DONNELLY CT. 14 DONNELLY CT.	t-D fire sprkler sys. dated 1/9/09. Site i Site inspection 1st Lo Lo	See of inspect of floor report 27	mmts dated 10/21/08. See Rev. dated 11 ommts dated 12/8/08 D. Dammen site in tion D.Dammen 1st floor Columns 1-3/A_1 smaining area see comments dated 1/21/1 SFD	/26/08 D. Da sp. For 1st F O see comm	mmen site inspt. 1s ir-columns 6 to 7/B.		
column 1-3/A see commts o D.Dammen S 10 DONNELLY CT.	t-D fire sprkler sys. dated 1/9/09. Site i Site inspection 1st Lo Lo	See of inspect floor re of 27 of 28	mmts dated 10/21/08. See Rev. dated 11 ommts dated 12/8/08 D. Dammen site in tion D.Dammen 1st floor Columns 1-3/A_i smaining area see comments dated 1/21// SFD SFD	/26/08 D. Da sp. For 1st F O see comm	mmen site inspt. 1s ir-columns 6 to 7/B.		
column 1-3/A see commts of D.Dammen S 10 DONNELLY CT. 14 DONNELLY CT. 2 DONNELLY CT.	t-D fire sprkler sys. dated 1/9/09. Site i Site inspection 1st Lo Lo	See of inspect floor report 27 of 28 of 25	mmts dated 10/21/08. See Rev. dated 11 ommts dated 12/8/08 D. Dammen site in tion D.Dammen 1st floor Columns 1-3/A_I smalining area see comments dated 1/21// SFD SFD SFD SFD	/26/08 D. Da sp. For 1st F O see comm	mmen site inspt. 1s ir-columns 6 to 7/B.		
column 1-3/A see commts of D.Dammen S 10 DONNELLY CT. 14 DONNELLY CT. 2 DONNELLY CT. 6 DONNELLY CT. 13 DOOLEY CT	N-D fire sprkler sys. dated 1/9/09. Site i Site inspection 1st Lo Lo Lo	See of inspect floor report 27 of 28 of 25	mmts dated 10/21/08. See Rev. dated 11 ommts dated 12/8/08 D. Dammen site in tion D.Dammen 1st floor Columns 1-3/A_1 emaining area see comments dated 1/21// SFD SFD SFD SFD SFD SFD	/26/08 D. Da sp. For 1st F O see comm	mmen site inspt. 1s ir-columns 6 to 7/B.		
column 1-3/A see commts o D.Dammen S 10 DONNELLY CT. 14 DONNELLY CT. 2 DONNELLY CT. 6 DONNELLY CT. 13 DOOLEY CT 56 DOROTHY WAY	-D fire sprikler sys. dated 1/9/09. Site i Site inspection 1st Lo Lo Lo	See of inspect floor re of 27 of 28 of 25 of 26	mmts dated 10/21/08. See Rev. dated 11 ommts dated 12/8/08 D. Dammen site in tion D.Dammen 1st floor Columns 1-3/A_1 emaining area see comments dated 1/21/0 SFD SFD SFD SFD SFD SFD SFD	/26/08 D. Da sp. For 1st F O see comm	mmen site inspt. 1s ir-columns 6 to 7/B.		
column 1-3/A see commts o D.Dammen S 10 DONNELLY CT. 14 DONNELLY CT. 2 DONNELLY CT. 6 DONNELLY CT. 13 DOOLEY CT 56 DOROTHY WAY	-D fire sprikler sys. dated 1/9/09. Site i Site inspection 1st Lo Lo Lo Lo	See coinspect of the control of the	mmts dated 10/21/08. See Rev. dated 11 ommts dated 12/8/08 D. Dammen site in tion D.Dammen 1st floor Columns 1-3/A_1 emaining area see comments dated 1/21/0 SFD SFD SFD SFD SFD SFD SFD SFD SFD	/26/08 D. Da sp. For 1st F O see comm	mmen site inspt. 1s ir-columns 6 to 7/B.		
column 1-3/A see commts o D.Dammen S 10 DONNELLY CT. 14 DONNELLY CT. 2 DONNELLY CT. 6 DONNELLY CT. 13 DOOLEY CT 56 DOROTHY WAY 60 DOROTHY WAY	-D fire sprikler sys. dated 1/9/09. Site i dated 1/9/09. Site i Lo	See coinspect floor re of 27 of 28 of 25 of 26 OT 7	mmts dated 10/21/08. See Rev. dated 11 ommts dated 12/8/08 D. Dammen site in tion D.Dammen 1st floor Columns 1-3/A_1 maining area see comments dated 1/21/0 SFD	/26/08 D. Da sp. For 1st F O see comm	mmen site inspt. 1s ir-columns 6 to 7/B.		
column 1-3/A see commts of D.Dammen S 10 DONNELLY CT. 14 DONNELLY CT. 2 DONNELLY CT. 6 DONNELLY CT. 13 DOOLEY CT. 56 DOROTHY WAY 60 DOROTHY WAY 67 Dorothy Wy 71 Dorothy Wy	I-D fire sprikler sys. dated 1/9/09. Site i dated 1/9/09. Site i Lo	See coinspect filoor re of 27 of 28 of 25 of 26 OT 7 OT 6 of 1	mmts dated 10/21/08. See Rev. dated 11 ommts dated 12/8/08 D. Dammen site in tion D.Dammen 1st floor Columns 1-3/A_1 maining area see comments dated 1/21/0 SFD	/26/08 D. Da sp. For 1st F O see comm	mmen site inspt. 1s ir-columns 6 to 7/B.		
column 1-3/A see commts o D.Dammen S 10 DONNELLY CT. 14 DONNELLY CT. 2 DONNELLY CT. 6 DONNELLY CT.	k-D fire sprkler sys. dated 1/9/09. Site i dated 1/9/09. Site i Lo	See coinspect floor re of 27 of 28 of 26 of 26 OT 7 OT 6 of 1 of 2	mmts dated 10/21/08. See Rev. dated 11 ommts dated 12/8/08 D. Dammen site in tion D.Dammen 1st floor Columns 1-3/A_1 maining area see comments dated 1/21/0 SFD	/26/08 D. Da sp. For 1st F O see comm	mmen site inspt. 1s ir-columns 6 to 7/B.		
column 1-3/A see commts of D.Dammen S 10 DONNELLY CT. 14 DONNELLY CT. 2 DONNELLY CT. 6 DONNELLY CT. 13 DOOLEY CT 56 DOROTHY WAY 67 Dorothy Wy 71 Dorothy Wy 79 Dorothy Wy	k-D fire sprkler sys. dated 1/9/09. Site i dated 1/9/09. Site i Lo	See a inspect floor report 27 of 28 of 25 of 26 of 27 OT 7 OT 6 of 1 of 2 of 3	mmts dated 10/21/08. See Rev. dated 11 ommts dated 12/8/08 D. Dammen site in tion D.Dammen 1st floor Columns 1-3/A_I smalining area see comments dated 1/21/I SFD	/26/08 D. Da sp. For 1st F O see comm	mmen site inspt. 1s ir-columns 6 to 7/B.		
column 1-3/A see commts of D.Dammen S 10 DONNELLY CT. 14 DONNELLY CT. 2 DONNELLY CT. 6 DONNELLY CT. 13 DOOLEY CT 56 DOROTHY WAY 67 Dorothy Wy 71 Dorothy Wy 75 Dorothy Wy 79 Dorothy Wy 83 DOROTHY WAY	k-D fire sprkler sys. dated 1/9/09. Site i dated 1/9/09. Site i Lo	See a inspect floor report 27 of 28 of 25 of 26 of 27 OT 7 OT 6 of 1 of 2 of 3	mmts dated 10/21/08. See Rev. dated 11 ommts dated 12/8/08 D. Dammen site in tion D.Dammen 1st floor Columns 1-3/A_i smalling area see comments dated 1/21/i SFD	/26/08 D. Da sp. For 1st F O see comm	mmen site inspt. 1s ir-columns 6 to 7/B.		
column 1-3/A see commits of D.Dammen S 10 DONNELLY CT. 14 DONNELLY CT. 2 DONNELLY CT. 6 DONNELLY CT. 13 DOOLEY CT 56 DOROTHY WAY 67 Dorothy WAY 67 Dorothy Wy 71 Dorothy Wy 79 Dorothy Wy 83 DOROTHY WAY 51 EAGLE DR.	r-D fire sprkler sys. dated 1/9/09. Site i Lite inspection 1st Lo	See a inspect floor report 27 of 28 of 25 of 26 of 27 OT 7 OT 6 of 1 of 2 of 3	mmts dated 10/21/08. See Rev. dated 11 ommts dated 12/8/08 D. Dammen site in tion D.Dammen 1st floor Columns 1-3/A_I smalining area see comments dated 1/21/0 SFD	/26/08 D. Da sp. For 1st F O see comm	mmen site inspt. 1s ir-columns 6 to 7/B.		
column 1-3/A see commits of D.Dammen S 10 DONNELLY CT. 14 DONNELLY CT. 2 DONNELLY CT. 6 DONNELLY CT. 13 DOOLEY CT 56 DOROTHY WAY 60 DOROTHY WAY 60 DOROTHY WAY 71 Dorothy Wy 75 Dorothy Wy 79 Dorothy Wy 83 DOROTHY WAY 51 EAGLE DR. 2 EAST BARBERRY PL	-D fire sprkler sys. dated 1/9/09. Site i Lo	See of inspect floor report 27 of 28 of 25 of 26 of 7 OT 6 of 1 of 2 of 3 of 4	mmts dated 10/21/08. See Rev. dated 11 ommts dated 12/8/08 D. Dammen site in tion D.Dammen 1st floor Columns 1-3/A_I smalining area see comments dated 1/21/0 SFD	/26/08 D. Da sp. For 1st F O see comm	mmen site inspt. 1s ir-columns 6 to 7/B.		
column 1-3/A see commts of D.Dammen S 10 DONNELLY CT. 14 DONNELLY CT. 2 DONNELLY CT. 6 DONNELLY CT. 13 DOOLEY CT 56 DOROTHY WAY 60 DOROTHY WAY 60 TO Dorothy Wy 71 Dorothy Wy 75 Dorothy Wy 79 Dorothy Wy 83 DOROTHY WAY 61 EAGLE DR. 2 EAST BARBERRY PL 6 EAST BARBERRY PL	-D fire sprkler sys. dated 1/9/09. Site i Lo	See of inspect iffoor re of 27 of 28 of 25 of 26 OT 7 OT 6 of 1 of 2 of 3 of 4	mmts dated 10/21/08. See Rev. dated 11 ommts dated 12/8/08 D. Dammen site in tion D.Dammen 1st floor Columns 1-3/A_I smallning area see comments dated 1/21/0 SFD	/26/08 D. Da sp. For 1st F O see comm	mmen site inspt. 1s ir-columns 6 to 7/B.		
column 1-3/A see commits of D.Dammen S 10 DONNELLY CT. 14 DONNELLY CT. 2 DONNELLY CT. 6 DONNELLY CT. 13 DOOLEY CT 56 DOROTHY WAY 60 DOROTHY WAY 67 Dorothy Wy 71 Dorothy Wy 75 Dorothy Wy 83 DOROTHY WAY 51 EAGLE DR. 2 EAST BARBERRY PL 6 EAST BARBERRY PL	-D fire sprkler sys. dated 1/9/09. Site i Lo	See coinspect inspect inspect 27 ot 28 ot 25 ot 26 OT 7 OT 6 ot 1 ot 2 ot 3 ot 4 ot 252 ot 251	mmts dated 10/21/08. See Rev. dated 11 ommts dated 12/8/08 D. Dammen site in tion D.Dammen 1st floor Columns 1-3/A_I smallning area see comments dated 1/21/0 SFD	/26/08 D. Da sp. For 1st F O see comm	mmen site inspt. 1s ir-columns 6 to 7/B.		
column 1-3/A see commts o D.Dammen S 10 DONNELLY CT. 14 DONNELLY CT. 2 DONNELLY CT. 6 DONNELLY CT. 13 DOOLEY CT 56 DOROTHY WAY 60 DOROTHY WAY 67 Dorothy Wy 71 Dorothy Wy	-D fire sprkler sys. dated 1/9/09. Site i Lite inspection 1st Lo	See coinspect inspect inspect 27 ot 28 ot 25 ot 26 OT 7 OT 6 ot 1 ot 2 ot 3 ot 4 ot 252 ot 251	mmts dated 10/21/08. See Rev. dated 11 ommts dated 12/8/08 D. Dammen site in tion D.Dammen 1st floor Columns 1-3/A_I smallning area see comments dated 1/21/0 SFD	/26/08 D. Da sp. For 1st F O see comm	mmen site inspt. 1s ir-columns 6 to 7/B.		
column 1-3/A see commits of D.Dammen S 10 DONNELLY CT. 14 DONNELLY CT. 2 DONNELLY CT. 6 DONNELLY CT. 13 DOOLEY CT 56 DOROTHY WAY 67 DOROTHY WAY 67 Dorothy Wy 71 Dorothy Wy 79 Dorothy Wy 83 DOROTHY WAY 51 EAGLE DR. 2 EAST BARBERRY PL 9 EAST BARBERRY PL	-D fire sprkler sys. dated 1/9/09. Site i Lite inspection 1st Lite Lo L	See coinspect inspect inspect 27 ot 28 ot 25 ot 26 OT 7 OT 6 ot 1 ot 2 ot 3 ot 4 ot 252 ot 251	mmts dated 10/21/08. See Rev. dated 11 ommts dated 12/8/08 D. Dammen site in tion D.Dammen 1st floor Columns 1-3/A_1 mmaining area see comments dated 1/21/0 SFD	/26/08 D. Da sp. For 1st F O see comm	mmen site inspt. 1s ir-columns 6 to 7/B.		
column 1-3/A see commts of D.Dammen S 10 DONNELLY CT. 14 DONNELLY CT. 2 DONNELLY CT. 3 DOOLEY CT 13 DOOLEY CT 15 DOOLEY CT 16 DOROTHY WAY 67 Dorothy Wy 75 Dorothy Wy 79 Dorothy Wy 83 DOROTHY WAY 51 EAGLE DR. 2 EAST BARBERRY PL 6 EAST BARBERRY PL 9 EAST BARBERRY PL 11 EDWARDS CT. 13 EDWARDS CT.	-D fire sprkler sys. dated 1/9/09. Site i Lite inspection 1st Lite Lo L	See coinspect inspect inspect 27 ot 28 ot 25 ot 26 OT 7 OT 6 ot 1 ot 2 ot 3 ot 4 ot 252 ot 251	mmts dated 10/21/08. See Rev. dated 11 ommts dated 12/8/08 D. Dammen site in tion D.Dammen 1st floor Columns 1-3/A_I smalining area see comments dated 1/21/I SFD	/26/08 D. Da sp. For 1st F O see comm	mmen site inspt. 1s ir-columns 6 to 7/B.		
column 1-3/A see commts of D.Dammen S 10 DONNELLY CT. 14 DONNELLY CT. 14 DONNELLY CT. 15 DONLELY CT. 15 DONLEY CT 16 DOROTHY WAY 16 DOROTHY WAY 17 Dorothy Wy 17 Dorothy Wy 18 DOROTHY WAY 19 Dorothy Wy 15 LAGLE DR. 16 EAST BARBERRY PL 11 EDWARDS CT.	-D fire sprkler sys. dated 1/9/09. Site i Lite inspection 1st Lite Lo L	See coinspect inspect inspect 27 ot 28 ot 25 ot 26 OT 7 OT 6 ot 1 ot 2 ot 3 ot 4 ot 252 ot 251	mmts dated 10/21/08. See Rev. dated 11 ommts dated 12/8/08 D. Dammen site in tion D.Dammen 1st floor Columns 1-3/A_I smalining area see comments dated 1/21/0 SFD	/26/08 D. Da sp. For 1st F O see comm	mmen site inspt. 1s ir-columns 6 to 7/B.		

Page 12 of 48

Address	Suite Business Name	Five Year Test Date	Central Station Monitoring Req?	Excluded Next from Insp Date Schedule?
28 EDWARDS CT.	SFD			
31 EDWARDS CT.	SFD			
33 EDWARDS CT.	SFD			
35 EDWARDS CT.	SFD			
42 EDWARDS CT.	SFD			
44 EDWARDS CT.	SFD			
46 EDWARDS CT.	SFD			
51 EDWARDS CT.	SFD			
63 EDWARDS CT.	SFD			
55 EDWARDS CT.	SFD			
62 EDWARDS CT.	SFD			
64 EDWARDS CT.	SFD			
66 EDWARDS CT.	SFD			
68 EDWARDS CT.	SFD			
71 EDWARDS CT.	SFD			
75 EDWARDS CT.	SFD			
77 EDWARDS CT.	SFD			
82 EDWARDS CT.	SFD			
84 EDWARDS CT.	SFD			
86 EDWARDS CT.	SFD			
88 EDWARDS CT.	SFD			Ö
203 EL BONITO DR.	Hamilton Pool		✓	
4382				
610 ELDRIDGE CT	SFD			
1115 ELM DR.	SFD			
1127 ELM DR.	SFD			
11 ELMVIEW WAY	SFD			
15 ELMVIEW WAY	SFD			
19 ELMVIEW WAY	SFD			
23 ELMVIEW WAY	SFD			
27 ELMVIEW WAY	SFD			
3 ELMVIÉW WAY	SFD			
31 ELMVIEW WAY	SFD			
7 ELMVIEW WAY	SFD			
23 ELMWOOD CT.	SFD			
24 ELMWOOD CT.	SFD			
319 Enfrente Rd	NFPD Station 4	9/5/2010		
405 ENFRENTE DR	BUILDING SHELL - BAY TREE	PARK 3/22/2017	(1)	
415 ENFRENTE DR	415-437 BAY TREE PARK CONDOS	1/1/2008		
2688				
26 ENTRADA DR.	SFD			
27 ENTRADA DR.	SFD			
300 ENTRADA DR	DOLLHOUSES TRAINS & MOR	E 10/1/2005		
10/27/11: Sprinkler inform GF	nation was never entered. Put in a dummy dat	e of 10/01/06 to gene	erate letter for inspe-	ction.
399 ENTRADA DR	IN-N-OUT BURGER(WAS NUR:	SERY)		
455 ENTRADA DR	Dollar Tree	5/5/2014	✓	
See 455 Entrada for unde	erground.			
459 ENTRADA DR	FRANKS BAR-B-QUE	5/16/2013		
754				
487 ENTRADA DR	HEALTH WORKS			

Page 13 of 48

Address	Suite	Business Name	Five Year Test Date	Central Station Monitoring Req?	Next Insp Date	Excluded from Schedule?
514 Entrada Dr	Bldg, 7	Villa Entrada	11/26/2008	V		
518 Entrada Dr		Villa Entrada	11/25/2008	~		
522 ENTRADA DR	-	VILLA ENTRADA	11/25/2008	~		m
524 Entrada Dr		Villa Entrada	11/25/2008	•		
526 Entrada DR	Bldg. 4	Villa Entrada	11/25/2008	~		m
530 Entrada Dr		Villa Entrada	11/25/2008	₩		
4 ESSEX DR	Lot 41	SFD				ñ
7 ESSEX DR	Lot 46	SFD				13
8 ESSEX DR	Lat 42	SFD				
432 ESTADO WAY		SFD				
793 EUCALYPTUS AVE.		SFD				
797 EUCALYPTUS AVE.		SFD				
836 EUCALYPTUS AVE		SFD				
5 FABIAN CT.		SFD				
629 FAIRHAVEN WAY		SFD				
531 FAIRHAVEN WAY		SFD				
633 FAIRHAVEN WAY		SFD				
335 Fairway Dr		SFD				
465 Fairway Dr		Brisco Residence				
548 FAIRWAY DR.		SFD				
611 FAIRWAY DR		SFD				
85 FAIRWAY DR		SFD		0		
4113						
2008 FELIZ RD.		SFD		577		
2015 FELIZ RD		SFD				
2038 FELIZ RD.		SFD		ñ		ñ
2059 FELIZ RD.		SFD				
2070 FELIZ RD		SFD				ñ
60 FERDINAND WAY		SFD		m		
1106 FERRIS DR		CEDARS FERRIS HOUSE			10/1/2011	Ö
449 FIELDSTONE DR.		SFD				Fi.
1137 First St		First Street Apartments	4/14/2015	✓	1/1/2012	
2863		The circuit paraments	4/14/2010	142.1		
22 FONTANA CT.		SFD		[m]		[7]
1024 FOURTH ST.		SECOND UNIT				
10 FREDSON CT.		SFD		m		m
24 GALLI DR		BUILDING SHELL	3/3/2005			
2396			00200	0.0		0.00
46 GALLI DR		BIO MARIN PHARMACEUTICALS	12/1/2011	~		
50 GALLI DR		CARME INDUSTR.	4/13/2016	ñ		m
67 Galli Dr		Building Shell	8/15/2016	Ħ		ā
	LEONARDI 5 V	R. INSPECTION SCHEDULED FOR		langer!		No. of
70 GALLI DR		ACADEMY STUDIOS	4/9/2012	Ė		
1357		THE SECOND SECOND				1000
84 GALLI DR		Morton's & Bassitt Spices	5/1/2008	m		П
	T REC'D 10/24/	08. FAILED DUE TO DEFICIENCIES		ED 10/30/08 GE		hand
1 GANEY CT.	Lot 7	SFD	. Carrier House			
10 GANEY CT.	Lot 10	SFD		H		
2 GANEY CT.	Lot 10	SFD		m		
		SFD		Ħ		Ħ
S CANEV CT						
5 GANEY CT. 5 GANEY CT.	Lat 8 Lat 11	SFD		H		-

Page 14 of 48

Address	Suite	- Business Name	Five Year Test Date	Central Station Monitoring Req?	Next Insp Date	Excluded from Schedule?
10 GARAVENTA CT.		SFD				
14 GARAVENTA CT.		SFD				
18 GARAVENTA CT.		SFD		111		
22 GARAVENTA CT.		SED				H
GARAVENTA CT.		SED				m
11 GARDNER CT.	Lot 478	4.6		m		H
111 GARDNER CT.	Lot 478			H		
113 GARDNER CT.	Lat 477	T		H		-
13 GARDNER CT.	Lot 477			H		H
15 GARDNER CT.	Lat 476			ñ		H
22 GARDNER CT.	Lot 468			m		
24 GARDNER CT.	Lot 467			Ä		in the second
31 GARDNER CT.	Lot 475			금		H
				౼		ind.
33 GARDNER CT.	Lot 474			L-1		님
42 GARDNER CT.	Lot 469			H		(m)
44 GARDNER CT.	Lot 470					님
46 GARDNER CT.	Lot 471					lead (m)
51 GARDNER CT.	Let 473			닖		
53 GARDNER CT.	Lot 472					h
20 GLEN LN.		SFD		100		lean!
6 GOTHIC DR.	Lot 23	SFD				닏
19 GOTHIC DR.	Lot 20	SFD		D-73		닏
23 GOTHIC DR.	Lot 21	SFD		100		
I0 GRANDVIEW		KELLEHER CORP	11/2/2017			Li
	REPORT REC'D	10/26/09. SYSTEM FAILED DUE TO I	DEFICIENCIES	S. LETTER MAILED). GF	-
290 Grandview Ave		SFD				
348 GRANDVIEW AVE.		SFD				1
1300 GRANT AV		BUILDING SHELL	8/27/2013			
2611						
300 GRANT AVE.	102	DR, SUZANNE D. HUANG, O.D.		✓		
500 GRANT AV		BUILDING SHELL	6/26/2017	~		1
6/29/12: PER BARB	ARA, SINCLAIR (COMPLETED INSPECTION ON 6/14/12	2. GF	****		400
525 GRANT AV		CITIBANK	4/1/2014		1/1/2004	
701 GRANT AV		TAGLIAFERRI'S				L.J
703 GRANT AV		NOAH'S BAGELS				
707 GRANT AV		cvs	11/26/2013	✓		
5 YR, CERT REC'D	12/22/08, GF					
719 GRANT AV		CREEKSIDE BAKERY	6/1/2006			===
727 GRANT AV		IDEAL STATIONERS	6/1/2006			
761 GRANT AV		SAVE MART SUPERMARKET #732	8/19/2013			
322						
787 GRANT AVE.		BRIDGE POINT ACADEMY	4/1/2015		1/1/2012	
Was CREEKSIDE V	ILLAGE SCHOOL					
50 GRANT AV		BUILDING SHELL	10/31/2016			
772						
107 GRANT AV		GOLDEN EGG OMELETTE HOUSE	6/9/2010	~	1/1/2004	•
	29/10: FAILDED	DUE TO DEFICIENCIES. LETTER MA		_	A THE SHAPE	_
11 GRANT AVE.	- IV. I PHENCE	ANOKHA CUISINE OF INDIA	5/21/2014	V		\Box
4426		THE STATE OF STATE OF STATE OF	WE 112014			
111-813 Grant Avenue		COMMERCIAL SPACE		~		
77 GRANT AV		FINNEGAN'S MARIN	5/30/2011	V		-

Page 15 of 48

Address	Suite	Business Name	Five Year Test Date	Central Station Monitoring Req?	Next Insp Date	Excluded from Schedule?
379 Grant Av		Powell's Sweet Shop		✓		
999 GRANT AVE.		UMPQUA BANK		₹.		
GREGOR LN.		SFD				
GROVE LN.		SFD				
19 H LN		SFD				
i0 H Ln		SFD - VACANT		✓.		
0 HAMILTON DR		CERAMIC TILE WORLD DESIGNS	9/28/2016	~		
7/21/11: Per E	mily, inspection is sci					
11 HAMILTON DR		A & P Moving Inc.	9/12/2013			
	2684			-		1000
30 HAMILTON DR	F	RICHARD GOHEEN		1		
385 Hamilton Pkwy		6 New Beginnings Center 101-116 & 201- 216	11/7/2013	S		W
	2763			CSI.		
399 HAMILTON PKWY	hide and Decider	NEW BEGINNINGS CENTER	6/29/2011	~	1/1/2013	iJ
400 HAMILTON PKWY	bldg and Residence	MARRIOTT COURTYARD	6/30/2014		1/1/2012	
7 HAMILTON DR	2136	A AND P MOVING INC	9/12/2013	П		m
	1483	A AND P MOVING INC	W 12/2013			hand.
0 Hamilton Landing		r BUILDING SHELL (was 8 Hamilton Landing)		Z		1
	4016	-				
0 Hamilton Landing Han	gar 8	Visual Concepts Entertainment/2K				
		Sports				
Hamilton Landing	_	r BUILDING SHELL	4/24/2015			1
	3549					-
HAMILTON LANDING		A BUILDING SHELL	5/24/2017	L.J		
	2444	P. I.		F-3		
Hamilton Landing Hang	ar 5 3551	BUILDING SHELL	4/30/2015	L		Li
HAMILTON LANDING H		MARIN COMMUNITY FOUNDATION		~		F7
HAMILTON LANDING 1	•	RAPTOR		7		Ö
Hamilton Landing		BUILDING SHELL	4/30/2015	ñ		
_	3550					
Hamilton Landing		r BUILDING SHELL was 750 Hangar				
•	-	Ave				
	4103			-		
HAMILTON LANDING F		DISNEY-IM DIGITAL		L		
	4367					p===0.
Hamilton Landing		BUILDING SHELL Vacant Lot- was		U		
Hamilton I sedies	Herro	600/700? Hangar Ave		m		m
Hamilton Landing	manga	BUILDING SHELL was 850 Hangar Ave		CJ		L
HAMILTON LANDING F	IANGAR 9	DISNEY-IM DIGITAL		✓		
	4368					
HAMPSHIRE WAY		SFD				
55 Hangar Ave		Hamilton Firehouse Museum		₹		
_	4049					
2 HARBOR DR		HOUSE OF DANIELS	7/15/2008	~		
	762					
9 Harbor Dr		SFD				
4 HARDING DR.		SFD				
HARRIS HILL DR.		SFD				m

Page 16 of 48

Address	Suite	Business Name	Five Year Test Date	Central Station Monitoring Req?	Next Insp Date	Excluded from Schedule?
2077 Hatch Rd		Hennessy Residence				
HATHAWAY DR.		BUILDING SHELL	2/16/2011	~		
1 Hathaway Dr	Bldg.14	Bay Vista Apartments @ Meadow Park	2/16/2011	~	1/1/2013	
8/3/11: PER GLENN	AT BAY VISTA	SHOULD BE COMPLETED WITHIN THE	NEXT WEE	K. GF		
2 Hathaway Dr	Bldg. 1	5 Bay Vista Apartments @ Meadow Park	2/16/2011	✓	1/1/2013	
8/3/11: PER GLENN	AT BAY VISTA	SHOULD BE COMPLETED WITHIN THE	NEXT WEE	K. GF		
3 Hathaway Dr	Bldg. 1	3 Bay Vista Apartments @ Meadow Park	2/16/2011	✓	1/1/2013	
8/3/11: PER GLENN	AT BAY VISTA	, SHOULD BE COMPLETED WITHIN THE	NEXT WEE	K. GF		
4 Hathaway Dr		Bay Vista Apartments/ Pool /Laundry	2/16/2011	✓	1/1/2013	
8/3/11: PER GLENN	AT BAY VISTA	, SHOULD BE COMPLETED WITHIN THE	NEXT WEE	K. GF		
5 Hathaway Dr	Bidg. 1	2 Bay Vista Apartments @ Meadow Park	2/16/2011	✓	1/1/2013	
B/3/11: PER GLENN	AT BAY VISTA	, SHOULD BE COMPLETED WITHIN THE	NEXT WEE	K. GF		
6 Hathaway Dr	Bldg. 9	Bay Vista Apartments @ Meadow Park	2/16/2011	✓	1/1/2013	
8/3/11: PER GLENN	AT BAY VISTA	, SHOULD BE COMPLETED WITHIN THE	NEXT WEE	K. GF		
7 Hathaway Dr	Bldg, 1	1 Bay Vista Apartments @ Meadow Park	2/16/2011	✓.	1/1/2013	
8/3/11: PER GLENN	AT BAY VISTA	, SHOULD BE COMPLETED WITHIN THE	NEXT WEE	K. GF		
8 Hathaway Dr	Bldg. 1	0 Bay Vista Apartments @ Meadow Park	2/16/2011	✓	1/1/2013	
8/3/11: PER GLENN	AT BAY VISTA	, SHOULD BE COMPLETED WITHIN THE	NEXT WEE	K. GF		
817 HAYDEN AVE.		SFD				
12 HIDDEN OAKS DR.		SFD				
1110 Highland DR		NATIVITY OF CHRIST GREEK ORTHODOX CHURCH	3/8/2016		1/1/2009	
Are being completed		ym. Per Bonnie Alexander, Sprinkler inspe	ction comple	ted, but repairs nee	eded.	A787
1240 HIGHLAND DR.		SFD				
1560 HILL RD		MARGARET TODD SENIOR CENTER	3/18/2013			[]
1726				677-9		
1565 HILL RD		NOVATO HEALTHCARE CENTER	3/5/2018	뒤	1/1/2010	님
1628 HILL RD.		SFD				님
1705 HILL AVE.		SFD		님		
1710 Hill Rd	Lot 6	SFD				Lul
1714 Hill Rd	Lot 7	SFD		జ		님
1718 Hill Rd	Lot 8	SFD		H		
90 HILL RD		WBE BRADLEY ELECTRIC WAREHOUSE	1/28/2010	Li		
90 HILL RD		WBE BRADLEY ELECTRIC	1/28/2010			L.J
		3/10 PER WBE. 2/23/10 GF		-		-
2 Hillside Terrace - Formerly 48 Hillside Terrace 3490	3					LJ.
46 HOLLIDAY DR.		SFD		m		m
19 HOLLIDAY DR.		SED		luni []		
11 HOLLYLEAD WAY		SFD		H		H
12 HOLLYLEAF WAY		SFD		100		m
15 HOLLYLEAF WAY		SFD		H		H
16 HOLLYLEAF WAY		SED		H		H
20 HOLLYLEAF WAY		SED		jud jud		m
23 HOLLYLEAF WAY		SFD				H
24 HOLLYLEAF WAY		SFD		[7]		H
27 HOLLYLEAF WAY		SFD				
28 HOLLYLEAF WAY		SFD		ñ		
3 HOLLYLEAF WAY		SFD		m		П
3D HOLLYLEAF WAY		SFD				ñ
SO THOSE I SENT WITH		0.0		L		Land.

Page 17 of 48

Address	Suite	Business Name	Five Year Test Date	Central Station Monitoring Req?	Next Insp Date	Excluded from Schedule?
31 HOLLYLEAF WAY		SFD				
34 HOLLYLEAF WAY		SFD				
35 HOLLYLEAF WAY		SFD				
38 HOLLYLEAF WAY		SFD				
4 HOLLYLEAF WAY		SFD				
41 HOLLYLEAF WAY		SFD				
42 HOLLYLEAF WAY		SFD				(mar)
45 HOLLYLEAF WAY		SFD				
46 HOLLYLEAF WAY		SFD				
49 HOLLYLEAF WAY		SFD				
50 HOLLYLEAF WAY		SFD				
53 HOLLYLEAF WAY		SFD				
54 HOLLYLEAF WAY		SFD				
57 HOLLYLEAF WAY		SFD				ñ
58 HOLLYLEAF WAY		SFD				
61 HOLLYLEAF WAY		SFD				ñ
62 HOLLYLEAF WAY		SFD		m		m
62 HOLLYLEAF WAY		SFD				
65 HOLLYLEAF WAY		SFD				n
66 HOLLYLEAF WAY		SFD				
69 HOLLYLEAF WAY		SFD				100
7 HOLLYLEAF WAY		SFD		ñ		m
70 HOLLYLEAF WAY		SFD				m
73 HOLLYLEAF WAY		SED		m		m
74 HOLLYLEAF WAY		SFD				ñ
77 HOLLYLEAF WAY		SFD				m
8 HOLLYLEAF WAY		SFD				
81 HOLLYLEAF WAY		SFD		ñ		ñ
85 HOLLYLEAF WAY		SED				
89 HOLLYLEAF WAY		SFD		ñ		ñ
93 HOLLYLEAF WAY		SFD		m		H
93 HOLLYLEAF WAY		SFD				
HUTCHINS WAY		BUILDING SHELL	2/16/2011	2		-
1 Hutchins Way	Bida 1	Bay Vista Apartments @ Meadow Park		V	1/1/2013	n
	_	SHOULD BE COMPLETED WITHIN THE		1-1	17172015	1
3 Hutchins Way		Bay Vista Apartments @ Meadow Park	2/16/2011	▽	1/1/2013	
-	_	SHOULD BE COMPLETED WITHIN THE		K. GF		
4 Hutchins Way	Bldg. 8	Bay Vista Apartments @ Meadow Park	2/16/2011	~	1/1/2013	
•	-	SHOULD BE COMPLETED WITHIN THE		K GF		
5 Hutchins Way		Bay Vista Apartments / Community Bldg.	2/16/2011	✓	1/1/2013	
8/3/11: PER GLENN AT B	AY VISTA,	SHOULD BE COMPLETED WITHIN THE	E NEXT WEE	K. GF		
1800 IGNACIO BL		INDIAN VALLEY COLLEGE	4/1/2003			
Check File, contact person	n is Bob 1/1	2/05.				
300 IGNACIO BL		WEST AMERICA BANK	4/12/2017			
330 IGNACIO BL		BUILDING SHELL	8/22/2017			
	HOUT CERT	TIFICATION SCHEDULED FOR 8/7/12.	GF			
340 IGNACIO BL		BOCA Steak	9/8/2015	✓		
Received letter from AAA	Fire protect	ion regarding semi-annul service, sent let	ter out 2/2/06	Dc.		
Spoke with Shaw 6/10/11	received fin	al letter. 5 yr certification was done in 201	10 by Incom N	fechanical talk with	Jeff for	

a copy. DW 6/10/11

Address	Suite	Business Name	Five Year Test Date	Central Station Monitoring Req?	Excluded Next from Insp Date Schedule?
350 IGNACIO BL	,	Three Fifty Ignacio Condominium Association	12/20/2015	¥	
769					
366 IGNACIO BL		PACHECO PLAZA COMPLEX		~	
404 IGNACIO BL		Vacant			
404 Ignacio Blvd	404-452	BUILDING SHELL 404-452	5/3/2017		
3984					
408 IGNACIO BL		Vacant			
412 IGNACIO BL		JAVA GRILL			
416 IGNACIO BL		CLOTHES FIT			
418 IGNACIO BL		YOGA Loka			B
430 IGNACIO BL		Fabulous Framers			
Riser tag checked by Mi	H for date.				
434 IGNACIO BL		FACE VALUE BEAUTY SALON			
440 IGNACIO BL		VIDEO PLACE			
442 IGNACIO BL		NAIL SALON			
444 IGNACIO BL		PACHECO COIN LAUNDRY		Ö	. 0
446 IGNACIO BL		ONE HOUR CLEANERS		n	
446 IGNACIO BL	Α	Vacant			ñ
448 IGNACIO BL	-	The UPS Store			
452 IGNACIO BL		TAKI JAPANESE CUISINE		ă	H
454 IGNACIO BL	454-484	BULDING SHELL 454-484	5/3/2017		Ħ
773	454-464	BOLDING SPIELL 434-404	57572017	-	
458 IGNACIO BL		JOSEPH'S SHOE & REPAIR			m
460 IGNACIO BL		LANCE RASMUSSEN DDS			
464 IGNACIO BL		NATALIE & DARIA'S FLOWER & GIF		ă	
470 IGNACIO BL		PARADISE FOODS	5/3/2017	~	H
470 IGNACIO BL. 808		PARADISE FOODS	5/3/2017	•	Li
472 IGNACIO BL		VACANT		FT3	CT.
474 IGNACIO BL		WOODLAND PET FOODS & TREATS		ä	H
474 IGNACIO BL		Subway		H	
484 IGNACIO BL				H	H
464 IGNACIO BL 812		Novato Theatre Company		4)	hard
490 Ignacio Blvd	450 8 4	The Deiler Method		~	m
-	400 & 4	The Dailey Method		Ō	
1525 Indain Valley Road		Accessory Dwelling Unit		F-1	1000 C
142 INDIAN HILLS DR. 471 INDIAN SPRINGS RD		SFD SFD		7	
				<u>₩</u>	
1709 INDIAN VALLEY RD.		SFD		띮	L
1756 INDIAN VALLEY RD.		SFD		Li	L
1872 INDIAN VALLEY RD.		SFD		land prod	H
8 JACKSON CT.		SFD			
1 JAMISON CT.	Lot 1	SFD		L.J	L.J.
10 JAMISON CT.	Lot 4	SFD		Ö	100
2 JAMISON CT.	Lot 6	SFD			<u></u>
5 JAMISON CT.		SFD		브	
6 JAMISON CT.	Lot 5	SFD			L
9 JAMISON CT.	Lot 3	SFD			
10 JEFFREY CT.		SFD		8	
102 KELLY DR.	Lot 445				
104 KELLY DR.	Lot 446				
	Lot 447	SED		1.3	
106 KELLY DR.	C01 447	arb		front exists	hand

Page 19 of 48

Address	Suite E	Business Name	Five Year Test Date	Central Station Monitoring Req?	Excluded Next from Insp Date Schedule?
11 KELLY CT.		FD	rest Date	Montecing Neq7	msp Date Scheduler
11 KELLY GT. 111 KELLY DR.	Lot 396 S			H	
113 KELLY DR.	Lot 395 S				
115 KELLY DR.	Lot 394 S			H	ä
122 KELLY DR.	Lot 451 S				
124 KELLY DR.	Lot 450 S			F-1	
126 KELLY DR.	Lot 449 S			H	
13 KELLY CT.		FD		ă	
131 KELLY DR.	Lot 393 S			ri	ö
133 KELLY DR.	Lot 392 S			ŏ	Ĭ
142 KELLY DR.	Lot 452 S				H
144 KELLY DR.	Lot 453 S				ā
146 KELLY DR.	Lot 454 S			ñ	
148 KELLY DR.	Lot 455 S			H	ä
15 KELLY CT.		FD		8	m
151 KELLY DR.	Lot 391 S			Ħ	
153 KELLY DR.	Lot 390 Si			n	
162 KELLY DR	Lot 456 Si			H	Ö
164 KELLY DR.	Lot 457 St			H	
171 KELLY DR.	Lot 389 Si			ä	Ö
173 KELLY DR.	Lot 388 Si			H	
175 KELLY DR.	Lot 387 Si			m	
177 KELLY DR.	Lot 386 Si			H	
191 KELLY DR.	Lot 385 Si			m	
193 KELLY DR.	Lot 384 Si			ñ	ä
211 KELLY DR.	Lot 383 Si			П	
213 KELLY DR.	Lot 382 Si				
22 KELLY DR.	Lot 438 Si				Ĭ
22 KELLY CT.		FD		m	Ö
231 KELLY DR.	Lat 381 Si				
233 KELLY DR.	Lat 380 Si				
24 KELLY DR.	Lot 437 St				
24 KELLY CT.		FD.			
251 KELLY DR.	Lot 379 St	FD		m	m
253 KELLY DR.	Lot 378 SI				
255 KELLY DR.	Lot 377 St				
257 KELLY DR.	Lot 376 Si				
26 KELLY DR.	Lot 436 SI				
271 KELLY DR.	Lot 375 Si				
273 KELLY DR.	Lot 374 SF	FD			
275 KELLY DR.	Lot 373 SI	FD			
2A KELLY DR.	SI	FD			
2B KELLY DR.	SI	FD			
2C KELLY DR.		FD			
2D KELLY DR.		FD			98989888888888888888888888888888888888
31 KELLY DR.	Lot 406 SF	FD			
31 KELLY CT.	SI	FD .			
33 KELLY DR.	Lot 405 SI	FD			
33 KELLY CT.	SI	FD		Ö	
35 KELLY DR.	Lot 404 SF				
42 KELLY CT.		FD			
42 KELLY DR.	Lot 439 Si			process;	pros.

Page 20 of 48

Address		Suite	Business Name	Five Year Test Date	Central Station Monitoring Req?	Next Insp Date	Excluded from Schedule?
44 KELLY DR.		Lot 440	SFD		G		
44 KELLY CT.		01 . 70	SFD		Ö		
51 KELLY DR.		Lot 403					
51 KELLY CT.			SFD		ñ		n
53 KELLY DR.		Lot 402			n		
53 KELLY CT.			SFD		ñ		m
62 KELLY CT.			SFD		-		H
62 KELLY DR.		Lot 441			Ħ		m
64 KELLY DR.		Lat 442			m		m
64 KELLY CT.		201-12	SFD		H		Ħ
71 KELLY CT.			SFD		H		m
71 KELLY DR.		Lot 401					Ħ
73 KELLY DR.		Lat 400			Ħ		m
73 KELLY CT.		101 400	SFD		l'ord		H
73 KELLY CT.			SFD		Ħ		m
75 KELLY CT.			SFD		[m]		m
82 KELLY DR.		Lot 443			H		H
82 KELLY CT.		LOI 443	SFD				H
84 KELLY DR.		Lot 444			H		H
84 KELLY CT.		LOI 444	SFD				m
91 KELLY DR.		Lot 399			H		H
93 KELLY DR.		Lot 398					m
95 KELLY DR.		Lot 397			H		
					H		H
100 Kristin Marie Ct 11 KRISTY CT.		Lot 1	SFD (was 737 Atherton Ave) SFD		Ħ		Ħ
78 La Costa Ct.			SFD		V		H
2512 LAGUNA VISTA	DD.		SFD		Ď		
1 LAKEVIEW CT	DFC.		BUILDING SHELL	7/9/2014			
- DIVENTER OF	2414		DOIEDING OFFICE	77872014			
2 LAKEVIEW CT			BUILDING SHELL (even #'s 2-32)	7/9/2014			
E D THE THE TO	2412		DOLLOW OF THE COURT OF THE	17012014			
21 LAKEVIEW CT			BUILDING SHELL	7/9/2014	П		П
	2413			11012014			
816 LAMONT AV			CEDARS LAMONT HOUSE			10/1/2011	
100 LANDING CT			BUILDING SHELL	2/13/2018			
110 LANDING CT.			BUILDING SHELL	2/13/2018			ñ
120 LANDING CT		K.L	CALIBRATED CAPITAL INC	2,10,20,0	ñ		Ħ
120 LANDING CT		F/H	VACANT				
120 LANDING CT		J	EVERSYS CORPORATION				
120 LANDING CT		E	CLAXTON ASSOCIATES				
120 LANDING CT		C.D	BRUNNER ENTERPRISES, INC.		Ö		
120 LANDING CT		G	THE SILK PEDDLERS WORKSHOP				
120 LANDING CT		A.B	ERIC ERDMAN		Õ		Ï
130 LANDING CT			PUBLIC STORAGE	2/13/2018	✓		
	338			2 10 20 10	5.50		*const
1001-8 LARK CT			THE MEADOWS APARTMENTS	9/15/2013		1/1/2013	
301-05 LARK CT			THE MEADOWS APARTMENTS	9/15/2013	ā	1/1/2013	m
	2157		The second of the second secon	- TOTE 0 10	Name of Street		hanni'
401-05 LARK CT			THE MEADOWS APARTMENTS	9/15/2013		1/1/2013	
501-12 LARK CT			MEADOWS APARTMENTS	9/15/2013	Õ	1/1/2013	
					princip		-
601-09 LARK CT			MEADOWS APARTMENTS	9/15/2013		1/1/2013	

Page 21 of 48

Address	Suite	Business Name	Five Year Test Date	Central Station Monitoring Req?	Next Inco Date	Excluded from Schedule?
	Julie		rest Date			acredule?
10 LAURELWOOD DR.		SFD		닖		200
101 LAURELWOOD DR.	Lot 238					
104 LAURELWOOD DR.	Lot 248					<u></u>
105 LAURELWOOD DR.	Lot 239			100		
108 LAURELWOOD DR.	Lot 247					닏
109 LAURELWOOD DR.	Lot 240					
11 LAURELWOOD DR.		SFD		<u></u>		
112 LAURELWOOD DR.	Lot 246	SFD				
113 LAURELWOOD DR.	Lot 241	SFD				
116 LAURELWOOD DR.	Lot 245	SFD				
117 LAURELWOOD DR.	Lot 242	SFD				
120 LAURELWOOD DR.	Lot 244	SFD				
121 LAURELWOOD DR.	Lot 243	SFD				
124 LAURELWOOD DR.	Lot 261	SFD				
125 LAURELWOOD DR.	Lot 262	SFD				
128 LAURELWOOD DR.	Lot 275	SFD				
129 LAURELWOOD DR.	Lot 263	SFD				
132 LAURELWOOD DR.		SFD				
133 LAURELWOOD DR.	Lot 264	SFD				
136 LAURELWOOD DR.	Lot 277	SFD				
137 LAURELWOOD DR.	Lot 265	SFD				
140 LAURELWOOD DR.	Lot 278	SFD				
141 LAURELWOOD DR.		SFD				
144 LAURELWOOD DR.		SFD				
145 LAURELWOOD DR.	Lot 267	SFD				
148 LAURELWOOD DR.		SFD				
149 LAURELWOOD DR.	Lot 268	SFD				
152 LAURELWOOD DR.	Lot 281	SFD				
153 LAURELWOOD DR.	Lat 269	SFD				
156 LAURELWOOD DR.	Lot 282	SFD				
157 LAURELWOOD DR.	Lat 270	SFD				
160 LAURELWOOD DR.	Lot 283	SFD				
161 LAURELWOOD DR.	Lot 271	SFD				
164 LAURELWOOD DR.	Lat 284	SFD				:
165 LAURELWOOD DR.	Lot 272	SFD				
168 LAURELWOOD DR.	Lot 285					
169 LAURELWOOD DR.	Lot 273					
17 LAURELWOOD DR.		SFD				
172 LAURELWOOD DR.	Lot 285					
173 LAURELWOOD DR.	Lot 274					
176 LAURELWOOD DR.	Lot 287	SFD				(1)
20 LAURELWOOD DR.	Lot 200					
21 LAURELWOOD DR.		SFD				
24 LAURELWOOD DR.		SFD				
28 LAURELWOOD DR.	Lot 214					
32 LAURELWOOD DR.	Lot 215					
36 LAURELWOOD DR.	Lot 216					
40 LAURELWOOD DR.	Lot 217					Ö
44 LAURELWOOD DR.	Lot 218					
45 LAURELWOOD DR.		SFD				
48 LAURELWOOD DR.		SFD				
49 LAURELWOOD DR.	Lot 226					
						-

Page 22 of 48

Address	Suite	Business Name	Five Year Test Date	Central Station Monitoring Reg?	Excluded Next from Insp Date Schedule?
			Lest Date		Insp Date Schedule?
52 LAURELWOOD DR.	Lot 220				
53 LAURELWOOD DR.	Lot 227				님
56 LAURELWOOD DR.	Lot 221				
57 LAURELWOOD DR.	Lot 228			<u></u>	
60 LAURELWOOD DR.	Lot 222			딜	L.,
61 LAURELWOOD DR.	Lot 229	SFD		L	
64 LAURELWOOD DR.	Lot 223	SFD			
65 LAURELWOOD DR.	Lot 230	SFD			
68 LAURELWOOD DR.	Lot 224	SFD			
69 LAURELWOOD DR.	Lot 231	SFD			
73 LAURELWOOD DR.	Lot 232	SFD			
81 LAURELWOOD DR.	Lot 233	SFD			
85 LAURELWOOD DR.	Lot 234	SFD			
89 LAURELWOOD DR.	Lot 235	SFD			
9 LAURELWOOD DR.	Lot 195	SFD			
93 LAURELWOOD DR.	Lot 236	SFD			
97 LAURELWOOD DR.	Lat 237				П
2020 LEESE LN.		SED		r"	
15 LEVERONI CT		BUILDING SHELL	2/10/2015		
	SCHEDULED FO	OR END OF APRIL W/ ASTI. GF 3/25/10		100	2008
20 LEVERONI CT	DOI ILLUGILLE I C	Commercial Bldg.	10/5/2012	177	П
843		Commercial blog.	10/3/20/2		Conf
25 LEVERONI CT		BUILDING SHELL	2/10/2015	[7]	
2392		BUILDING SHELL	2/10/2015	hi	
32 LEVERONI CT		OFORGE STATE V ENTERPRISES	01510015	177	m
32 LEVERUNI CT		GEORGE FAMILY ENTERPRISES INC.	8/5/2016		
35 LEVERONI CT		TRAVEL WORKS INC			
See building shell fo	r sprinkler informa	tion, Dc			
35 Leveroni Ct		BUILDING SHELL	2/10/2015		
	SCHEDULED FO	R END OF APRIL W/ ASTI. GF 3/25/10)		-
40 LEVERONI CT		BUILDING SHELL	5/24/2018	n	
	e. Inc. will be resp	onsible for scheduling the 5yr sprinkler b		s for whole building.	De
40 LEVERONI CT	a,	Savoir Faire, Inc.		[7]	
847		Savoir Faire, Inc.		hand	land.
52 LEVERONI CT		TABRA		m	m
See building Shell for	vr dala	Transfer 1		termed	LI
52 LEVERONI CT	A delle.	BUILDING SHELL	2/12/2015		m
	COMEDIN ED 50				
	SUMEDULED FO	R END OF APRIL W/ ASTI. GF 3/25/10	,		m
52 LEVERONI CT		MULTIMEDIA, All 2nd floor			
See building shell fo	r datë.	Maria Bartana	E IA DIONE		
55 LEVERONI CT		Nacio Systems	5/12/2013	L.,i	1
	Stewart, having a	new sprinkler system put in. Will let us		is complete. GF	
60 LEVERONI CT		BUILDING SHELL	2/12/2015	Ļ	
5 YR. INSPECTION	SCHEDULED FO	R END OF APRIL W/ ASTI. GF 3/25/10		piliting	pinton,
		BUILDING SHELL	2/12/2015	Li	
68 LEVERONI CT	SCHEDULED FO	R END OF APRIL W/ ASTI. GF 3/25/10		85-8	24.46
5 YR. INSPECTION		SFD			
*** ***********************************					
5 YR. INSPECTION		SFD			i
5 YR. INSPECTION 11 LILAC PL.		SFD SFD			ö
5 YR. INSPECTION 11 LILAC PL. 12 LILAC PL.					
5 YR. INSPECTION 11 LILAC PL. 12 LILAC PL. 16 LILAC PL.		SFD			

Page 23 of 48

Address	Suite	Business Name	Five Year Test Date	Central Station Monitoring Req?	Next Insp Date	Excluded from Schedule?
3 LILAC PL.		SFD				
4 LILAC PL.		SFD				
7 LILAC PL.		SFD				
17 Lockton Lane		Single Family Dwelling				
592 LOUIS DR.		SFD				
600 LOUISE AVE.		SFD				
1180 LYNWOOD DR		GOOD SHEPHERD LUTHERAN CHURCH	6/20/2016		1/1/2014	
853						
1016 MACHIN AVE.		TREK WINE				
1026 MACHIN AVE.		TREK WINERY		✓		
822 MACHIN AVE.		CITY OF NOVATO ADMINISTRATIVE OFFICES		₩		
28 MADELINE CT.		SFD				£]
26 Magellan Ct		Tigger's Den			1/1/2011	
603 MANUEL DR.		SFD				
40 MARBLE HEAD LN		SFD				
22 MARCH FIELD CT.	Lot 24	SFD				
24 MARCH FIELD CT.	Lot 248					
26 MARCH FIELD CT.	Lot 249	SFD		Ш		
28 MARCH FIELD CT.	Lot 250					
31 MARCH FIELD CT.	Lot 259					L.
33 MARCH FIELD CT.	Lot 258	SFD				
2915				200.00		LITTLE .
35 MARCH FIELD CT.	Lot 257					
42 MARCH FIELD CT.	Lot 251	SFD				
44 MARCH FIELD CT.	Lot 252	SFD				
51 MARCH FIELD CT.	Lot 256					
53 MARCH FIELD CT.	255	SFD		딮		
62 MARCH FIELD CT.	Lot 253					
64 MARCH FIELD CT.	Lot 254			L		
2 MARGARITA TERRACE		BUILDING SHELL (even #'s 2-24)	7/9/2014			
34 MARGARITA TERRACE		BUILDING SHELL	7/9/2014	E.		
2417						
62 MARGARITA TERRACE		BUILDING SHELL	7/9/2014			
2418						
530 MARIN OAKS DR.		SFD				
1725 MARION AV	A-M	MARION PARK ASSOCIATES	3/13/2014		1/1/2013	
947				F==		
1830 MARION AVE.	Lot 6	SFD				E COM
1851 Marion Ave		SFD		~		
11 MATHER CT.		SFD		Li		
13 MATHER CT.		SFD		Li		드
15 MATHER CT.		SFD				브
22 MATHER CT.		SFD		님		
24 MATHER CT.		SFD		님		님
26 MATHER CT.		SFD		님		H
31 MATHER CT.		SFD		님		님
33 MATHER CT.		SFD		1		님
51 MATHER CT.		SFD				느
53 MATHER CT.		SFD				닖
55 MATHER CT.		SFD		L.		
62 MATHER CT.		SFD				Li

Page 24 of 48

Address	Suite	Business Name	Five Year Test Date	Central Station Monitoring Req?	Next Insp Date	Excluded from Schedule?
64 MATHER CT.		SFD				
73 MATHER CT.		SFD				
601 MC CLAY RD.		SFD				
604 MC CLAY RD.		SFD		n		H
611 MC CLAY RD.		BENESI RESIDENCE		- F		H
580 MC CLAY RD.		Single Family Dwelling		m		Ħ
818 MC CLAY RD.		SFD		H		Ħ
849 MC CLAY RD.		TUERKE RESIDENCE		m		H
4440		OERKE RESIDENCE				11
34 MENDOCINO LN.		SFD				[7]
41 MENDOCINO LN.		SFD		Ö		H
101 Michele Cir		CEDARS MICHELE CIRCLE	2/5/2007	ă	10/1/2011	m
114 MICHELE CIR.		SFD	2/5/2007	ŏ	10/1/2011	ñ
199 MICHELE CIR.		SFD		ö		H
2012 MILL RD.		SFD		177		loud [TT]
2012 MILL RD. 2016 MILL RD.		SFD		H		H
2016 MILL RD. 2086 MILL RD.		SFD		H		
				H		H
1128 MIRABELLA AVE.		SFD		H		
1137 MIRABELLA AV		SFD		H		
1140 MIRABELLA AVE.		SFD		H		
11 MIWOK DR.		SFD		land prod		H
102 MOFFET CT.	Lot 419					
104 MOFFET CT.	Lot 420			100		land.
106 Moffet Ct	Lot 421			님		H
11 MOFFET CT.	Lot 435					إسا
122 MOFFET CT.	Lot 422	SFD				
126 MOFFET CT.	Lot 424			land or o		land.
13 MOFFET CT.	Lot 434	SFD				
22 MOFFET CT.	Lot 411	SFD				Li
24 MOFFET CT.	Lot 412	SFD				
31 MOFFET CT.	Lot 433	SFD				
33 Moffet Ct	Lot 432	SFD				
12 MOFFET CT.	Lot 413	SFD				
44 MOFFET CT.	Lot 414	SFD				
51 MOFFET CT.	Lot 431	SFD				
53 MOFFET CT.	Lot 430	SFD				
55 MOFFET CT.	Lot 429	SFD				
50 MOFFET CT.	Lot 415	SFD				
32 MOFFET CT.	Lat 416	SFD				
71 MOFFET CT.	Lot 428	SFD				
73 MOFFET CT.	Lot 427	SFD				
32 MOFFET CT.	Lot 417	SFD				
34 MOFFET CT.	Lot 418					
1 MOFFET CT.	Lot 426					
33 MOFFET CT.	Lot 425					
1301 MONTE MARIA AVE.		SFD				
1320 MONTE MARIA AVE.		SFD		m		Ö
205 MONTEGO KEY		SFD		Ē		=
2 MONTEREY CT		CREEKSIDE HOUSING CONDOMINIUM		ă	1/1/2004	ö
1215						

Page 25 of 48

Address	Suite	Business Name	Five Year Test Date	Central Station Monitoring Req?	Next Insp Date	Excluded from Schedule?
MUROC LAKE DR.		BUILDING SHELL	2/16/2011	✓		
1 Muroc Lake Dr	Bldg. 7	Bay Vista Apartments @ Meadow Park	2/16/2011	✓	1/1/2013	
		SHOULD BE COMPLETED WITHIN THE		C GF		-
2 Muroc Lake Dr		Bay Vista Apartments @ Meadow Park	2/16/2011	V	1/1/2013	
		SHOULD BE COMPLETED WITHIN THE		C GF		
4 Muroc Lake Dr		Bay Vista Apartments @ Meadow Park	2/16/2011	V	1/1/2013	
		SHOULD BE COMPLETED WITHIN THE		C GF		
6 Muroc Lake Dr		Bay Vista Apartments @ Meadow Park	2/16/2011	~	1/1/2013	
8/3/11: PER GLENN	_	SHOULD BE COMPLETED WITHIN THE	NEXT WEEK	C. GF		
5394 NAVE DR		OMA VILLAGE (WAS HENRY OHLHOFF)				
5420 NAVE DR.		BUILDING SHELL	1/1/2013	~		
4760						
5600 Nave Dr		McDonalds	7/16/2015	✓		
3030						
5720 Nave Dr		Safeway #2828	8/11/2013	~		
5800 NAVE DR	J&K	BEAUTY ISLAND		-		
5800 Nave Dr	А-М	Shell/Hamilton Market Place Shops A-M	11/23/2013	V		
4286						
5800 NAVE DR.	I-1	THE LOCAL CLEANERS		~		
5 YR. DATE UNDER	R BLDG SHELL					
5800 NAVE DR.	C	TAVOLA		✓		
5 YR. DATE UNDER	R BLDG SHELL					
5800 Nave Dr	M	Peet's Coffee & Tea				
5 YR. DATE UNDER	R BLDG SHELL					
5800 NAVE DR.	E	LA BOULANGE de HAMILTON		✓		
5 YR. DATE UNDER	R BLDG SHELL					
5800 NAVE DR.	F	20-20 OPTICAL		✓		U
5 YR. DATE UNDER						
5800 NAVE DR.	I-2	VACANT				
5 YR, DATE UNDER	R BLDG SHELL					
5800 NAVE DR.	S-1	PET FOOD EXPRESS		~		LJ
5 YR. DATE UNDER	R BLDG SHELL			eler.		
5800 NAVE DR.	D	SONOMA LATINA GRILL		✓		
5 YR. DATE UNDER				Per		
5800 NAVE DR	G	TOAST CAFÉ		~		
5 YR, DATE UNDER				570		6-0
5800 NAVE DR	н	MASSAGE HEIGHTS		2		
5 YR. DATE UNDER				C28		geon
5800 NAVE DR	L	YOGEN FRUZ		✓		1
5 YR. DATE UNDER	R BLDG SHELL			2770		pro-d
5820 NAVE DR		WELLS FARGO		L		LJ
5 YR. DATE UNDER						F-73
5820 Nave Dr	P1	Hamilton Market Place PAD Bldg P1	1/30/2013	✓		L.,
	WILL HAVE INSP	PECTION DONE BY 2/22/13. GF				form
8 NAVÉ CT.		SFD				
11 NEWPORT LANDING		SFD				
12 NEWPORT LANDING DR.	Lot 64	SFD		1777		L.
15 NEWPORT LANDING DR.	Lot 103					
16 NEWPORT LANDING DR.	Lot 65	SFD				
19 NEWPORT LANDING DR.	Lot 103					
20 NEWPORT LANDING DR.	Lot 66	SFD				

Page 26 of 48

Address	Suite	Business Name	Five Year Test Date	Central St		Excluded from Schedule?
	duste			Montoning	ricqr inap bate	Scriedule r
56 NEWPORT LANDING DR.		SFD				
59 NEWPORT LANDING DR.		SFD				
63 NEWPORT LANDING DR.		SFD				
67 NEWPORT LANDING DR.		SFD				
71 NEWPORT LANDING DR.		SFD				
72 NEWPORT LANDING DR.		SFD				
75 NEWPORT LANDING DR.		SFD				
76 NEWPORT LANDING DR.		SFD				
79 NEWPORT LANDING DR.		SFD				
8 NEWPORT LANDING DR.	Lot 63	SFD				
83 NEWPORT LANDING DR.		SFD				
87 NEWPORT LANDING DR.		SFD				
88 NEWPORT LANDING DR.		SFD				
91 NEWPORT LANDING DR.		SFD				
92 NEWPORT LANDING DR.		SFD				
95 NEWPORT LANDING DR.		SFD				
96 NEWPORT LANDING DR.		SED		n		П
99 NEWPORT LANDING DR.		SED				
39 NOVA LN.		SED				i i
1682 Novato Blvd	250	HEDANI, CHOY, SPAULDING, CHURCHILL & CHESUS				
1682 Novato Blvd.		Baywood Center (County Offices)		~		
4507						
1682 NOVATO BL		BUILDING SHELL	8/8/2012	- 17		T1
869		DOILDING CHEEL	0.0.20.2			
1701 NOVATO BL		BUILDING SHELL	4/1/2015	(7)		m
2401		BOILDING STILLE	4/112010	-		LI
1717 NOVATO BL		CYPRESS CREEK CONDOS				m
1744 Novato BL		Creekside Offices (Ste. 100,110,200)	1/9/2013	~		
1748 Novato Blvd.		Creekside Offices (Ste. 100,110,200,210)	11/13/2013	•		
3978		100,110,200,210)				
1842 NOVATO BL		CEDARS WALTER HOUSE			10/1/2011	[7]
2573		orbidio fine in the orbid		8.00	10/1/2011	Second Second
1914 NOVATO BL		CEDARS DANTE HOUSE			10/1/2011	
2001 NOVATO BL	2001-20	BUILDING SHELL	6/20/2017	-	10/1/2011	
		op. Mgmt. ASTI completed inspection will		n of #2031	Has now	Canal Canal
		ASTI will complete when determination i				
2023 NOVATO BL		BUILDING SHELL	6/20/2017			
		op. Mgmt. ASTI completed inspection will ASTI will complete when determination is				
2031 NOVATO BL		JJ'S BURGER BAR	6/11/2007			
2035 NOVATO BL		CVS	5/8/2012			
1/11/10 - System failed do t	o deficien					
2045 NOVATO BL		DELANO'S MARKET	1/18/2015			
2051 NOVATO BL	2051-20	BUILDING SHELL	6/20/2017	[]		
6/28/12: Per Betty Thorne I-	farizan Pr	op. Mgmt. ASTI completed inspection wit ASTI will complete when determination is	th the exception			
2085 NOVATO BL		WEST NOVATO SHELL		₹		
984						
3015 NOVATO BL		North Marin Water District	6/23/2015	~		
4362 NOVATO BLVD.		SFD				
12 NUNES DR.		SFD				

Page 27 of 48

Address	Suite	Buriners Name	Five Year Test Date	Central Station	Next	Excluded from Sobort 402
Address	Suite	Business Name	1 est Date	Monitoring Req?	insp Date	Schedule?
28 Nunes Dr		SFD				L.
29 NUNES DR.		SFD				
32 NUNES DR.		SFD				
36 NUNES DR.		SFD				
8 Nunes Dr		Novak Residence				£
340 OAK AVE.		SFD				E
345 OAK AVE.		SFD				
103 OAK GROVE DR.		SFD				
107 OAK GROVE DR.		SFD				
11 OAK GROVE DR.		SFD				
111 OAK GROVE DR.		SFD				
119 OAK GROVE DR.		SFD				
12 Oak Grove Dr	Bldg.1	Villa Entrada Senior Housing	11/25/2008	✓		
2758						
15 OAK GROVE DR.		SFD				
16 OAK GROVE DR.		SFD		Õ		
20 OAK GROVE AVE.		SFD		Ħ		
23 OAK GROVE DR.		SFD		ñ		m
24 OAK GROVE AVE.		SFD				H
27 OAK GROVE DR.		SFD		ñ		F-1
31 OAK GROVE DR.		SFD		m		H
35 OAK GROVE DR.		SFD		H		
39 OAK GROVE DR.		SFD		1-7		m
43 OAK GROVE DR.		SFD				늄
				H		L
51 OAK GROVE DR.		SFD		land proj		
55 OAK GROVE DR.		SFD				
60 OAK GROVE DR.		SFD				hood perm
64 OAK GROVE DR.		SFD				
7 OAK GROVE DR.		SFD		닖		占
71 OAK GROVE DR.		SFD		님		
72 OAK GROVE DR.		SFD		닏		4
76 OAK GROVE DR.		SFD		ᆜ		닖
79 OAK GROVE DR.		SFD		핕		
8 Oak Grove Dr	Bldg. 2	Villa Entrada	11/25/2008	~		U
2757						
80 OAK GROVE DR.		SFD				<u></u>
92 OAK GROVE DR.		SFD		~		
95 OAK GROVE DR.		SFD				
99 OAK GROVE DR.		SFD				
14 Oak Park Dr	Lot 4	SFD				
12345 Occupancy Test Street		ABC Occupancy Test	1/1/2005	•	1/1/2008	
11 Olive Court	Lot 3	SFD				
19 OLIVE CT.		SFD				
4437						
290 Olive Ave		Fraser Residence				
3 OLIVE CT		SFD				
31 OLIVE CT		SFD				
330 OLIVE AVE.		SFD				
414 OLIVE AVE.		SFD				B
660 OLIVE AVE.		SFD				
				North a		No.

Page 28 of 48

Address	Suite	Business Name	Five Year Test Date	Central Station Monitoring Req?	Next Insp Date	Excluded from Schedule?
845 OLIVE AV		TIMMER OFFICES - BLDG SHELL	12/23/2013	[7]		m
	993	Timeser of Flores September 1	12.20.2010			
875 OLIVE AV		Hertz Equipment Rental	4/6/2014			
	z. this location is clos	ed. They have the lease for the next 5 y		471. GF 02/23/09.		
875 OLIVE AV		Hertz Eguipment Rental Shop	4/6/2014			
	z. this facility is close	d. They have the lease for 5 yrs.; 510-77		2/23/09.		
881 OLIVE AV		KELLY-MOORE PAINTS	1/18/2018			
885 OLIVE AV	D	ROTO-ROOTER SEWER SERVICE	1/18/2018	£23		
885 OLIVE AV	A	VACANT	1/18/2018			
885 OLIVE AV	Ċ	ADWORKS	1/18/2018			
885 OLIVE AV	В	SUPERIOR REPORTING SERVICES	1/18/2018			
678 ORANGE AVE.		SFD				
25 Orchard		SFD				
626 OWENS DR		North Marin Senior Housing AKA Mackey Terrace)	3/22/2017		1/1/2013	
18	370					
11 OWL RIDGE CT.		SFD				
12 OWL RIDGE CT.		SFD				
15 OWL RIDGE CT.		SFD				
16 OWL RIDGE CT.		SFD				
19 OWL RIDGE CT.		SFD				
20 OWL RIDGE CT.		SFD				
23 OWL RIDGE CT.		SFD				
24 OWL RIDGE CT.		SFD				
27 OWL RIDGE CT.		SFD				
28 OWL RIDGE CT.		SFD				
31 OWL RIDGE CT.		SFD				
32 OWL RIDGE CT.		SFD				
35 OWL RIDGE CT.		SFD				
36 OWL RIDGE CT.		SFD				
8 OWL RIDGE CT.		SFD				
5 PACIFIC DR.		SFD				
500 Palm Dr		HAMILTON CITY CENTER	11/12/2014	~		
11 PALMER DR.		SFD				
12 PALMER DR.		SFD				
15 PALMER DR.		SFD				
16 PALMER DR.		SFD				
19 PALMER DR.		SFD				
20 PALMER DR.		SFD				
23 PALMER DR.		SFD				
24 PALMER DR.		SFD				
27 PALMER DR.		SFD				
28 PALMER DR.		SFD				
3 PALMER DR.		SFD				
31 PALMER DR.		SFD				
32 PALMER DR.		SFD				
35 PALMER DR.		SFD				
36 PALMER DR.		SFD				
39 PALMER DR.	Lat 78	SFD				
43 PALMER DR.	Lat 79	SFD				
47 PALMER DR.	Lot 80	SFD				
7 PALMER DR.		SFD		E 7		-

Page 29 of 48

	Address	Suite	Business Name	Five Year Test Date	Central Station Monitoring Req?	Excluded Next from Insp Date Schedule?
8	PALMER DR.		SFD			
2	32 PAMARON WAY		SERENA & LILY			
	32 PAMARON WY		GCX CORPORATION		~	
2	20 PAR LN.		SFD			
7	2 PAR LN		SFD			
1	1429 Park St		HAPPY HIPPOS DAY CARE			
6	06 PAXTON VILLA CT.		SFD			
6	666 Peach Street		SFD			
2	1 PEARL CT.	Lot 13	SFD			
2	5 PEARL CT.	Lot 14	SFD			
2	9 PEARL CT.	Lot 15	SFD			
3	31 PEARL CT.	Lot 16	SFD			
2	5 PEARL CT.	Lot 17	SFD			
	01 PELICAN LN		BUILDING SHELL	12/1/2007		
	PENNY LN		SFD			
6	PENNY LN.		SFD			
	9 PIERCE DR.		SFD			
	9 PIERCE DR.		SFD			
	1 PIMENTEL CT		NORTH BAY CONSERVATION CORPS.	10/24/2017		
		1582				
2	O PIMENTEL CT		BUILDING SHELL BLDG B	11/1/2001		
2	O PIMENTEL CT		BUILDING SHELL BLDG C	9/18/2007		
2	0 PIMENTEL CT		BUILDING SHELL BLDG. A	11/1/2001		
2	OC PIMENTEL CT		J.M.BUILDING			
2	OC PIMENTEL CT		OMNIGLOW			
2	OC PIMENTEL CT		VACANT			
2	1 PIMENTEL CT		BIOMARIN WAREHOUSE	1/13/2016		
		1863				
2	3 PIMENTEL CT		COMMERCIAL BLDG.	3/6/2013		
		4340				
8	153 PINE AVE.		SFD			
1	0 PINHEIRO CIR		SFD			
1	00 PINHEIRO CIR	Lot 103	SFD			
1	01 PINHEIRO CIR.	Lot 109	SFD			
1	04 PINHEIRO CIR	Lot 102	SFD			
1	08 PINHEIRO CIR.	Lot 101	SFD			
1	09 PINHEIRO CIR	Lot 111	SFD			
1	12 PINHEIRO CIR.	Lot 100	SFD			
1	13 PINHEIRO CIR	Lot 112	SFD			
1	16 PINHEIRO CIR	Lot 99	SFD			
1	17 PINHEIRO CIR.	Lot 113	SFD			
1	20 PINHEIRO CIR.	Lot 98	SFD			
1	21 PINHEIRO CIR.	Lot 114	SFD			
1	24 PINHEIRO CIR	Lot 97	SFD			
	25 PINHEIRO CIR.	Lot 115	SFD			
1	28 PINHEIRO CIR.	Lot 95	SFD			
	33 PINHEIRO CIR.	Lot 56	SFD			
	36 PINHEIRO CIR	Lot 94	SFD			
- 1						
	37 PINHEIRO CIR.	Lot 57	SFD			ii
1	37 PINHEIRO CIR. 4 PINHEIRO CIR	Lot 57	SFD SFD			占

Page 30 of 48

			Five Year	Central Station	Next	Excluded
Address	Suite	Business Name	Test Date	Monitoring Req?		Schedule?
2 PINHEIRO CIR		SFD				8
22 PINHEIRO CIR		SFD				
26 PINHEIRO CIR	Lot 17	SFD				B
35 PINHEIRO CIR.		SFD				
36 PINHEIRO CIR.	Lot 46	SFD				
3216						
40 PINHEIRO CIR.	Lot 45	SFD				G
43 PINHEIRO CIR.		SFD				
44 PINHEIRO CIR	Lot 44	SFD				ō
47 PINHEIRO CIR		SFD				
48 PINHEIRO CIR	Lot 48	SFD				
51 PINHEIRO CIR		SFD				
52 PINHEIRO CIR.	Lot 49	SFD				
55 PINHEIRO CIR		SFD				
59 PINHEIRO CIR	Lot 64	SFD				
6 PINHEIRO CIR		SFD				
60 PINHEIRO CIR		SFD				
63 PINHEIRO CIR	Lat 65	SFD				
64 PINHEIRO CIR		SFD				
67 PINHEIRO CIR	Lat 66	SFD				
68 PINHEIRO CIR		SFD				
71 PINHEIRO CIR		SFD				
72 PINHEIRO CIR.		SFD				
75 PINHEIRO CIR.		SFD				
76 PINHEIRO CIR.		SFD				
79 PINHEIRO CIR		SFD				
80 PINHEIRO CIR		SFD				
81 PINHEIRO CIR	Lot 78	SFD				
84 PINHEIRO CIR		SFD				
85 PINHEIRO CIR	Lot 79	SFD				<u></u>
88 Pinheiro Circle	Lot 106	SFD				
88 PINHEIRO CIR		SFD				
89 PINHEIRO CIR		SFD				
92 PINHEIRO CIR.	Lot 105	SFD				
93 PINHEIRO CIR	Lot 107					
97 PINHEIRO CIR	Lot 108					
31 PINHEIRO CIR		NOVA-RO III Apartments	9/23/2013		1/1/2013	
835		•				
23 PIZARRO		SFD				
99 PIZARRO AVE.		SFD				
606 PLUM ST.		SFD				
616 PLUM ST.		SFD				
629 PLUM ST		QUALITY CARE FOR KIDS			1/1/2011	-
679 PLUM ST.		Single Family Dwelling				
12 POPPY PL.		SFD				
16 POPPY PL.		SFD				
19 POPPY PL.		SFD				
20 POPPY PL.		SFD				
23 POPPY PL.		SFD				
27 POPPY PL.		SFD				
3 POPPY PL.		SFD				
4 POPPY PL		SFD				

Page 31 of 48

Address	Suite	Business Name	Five Year Test Date	Central Station Monitoring Req?	Next	Excluded from Schedule?
	Come		1000 Date	- manneary neq1	map Date	ouncourt.
7 POPPY PL.		SFD				片
8 POPPY PL.		SFD		H		H
100 PORTSMOUTH DR.		SFD		leed (CO)		
103 PORTSMOUTH DR.		SFD		H		H
107 PORTSMOUTH DR.		SFD		tond prod		land
108 PORTSMOUTH DR.		SFD		H		
111 PORTSMOUTH DR.		SFD		100		L
112 PORTSMOUTH DR.		SFD		m		d
115 PORTSMOUTH DR.		SFD		H		
116 PORTSMOUTH DR.		SFD		H		Land Land
119 PORTSMOUTH DR.		SFD		H		H
12 PORTSMOUTH DR.		SFD		H		
15 PORTSMOUTH DR.		SFD		2.3		
16 PORTSMOUTH DR.		SFD		H		
19 PORTSMOUTH DR.		SFD		띮		H
20 PORTSMOUTH DR.		SFD				
23 PORTSMOUTH DR.	Lot 27	SFD		E-ml		H
24 PORTSMOUTH DR.	Lot 59	SFD		님		님
27 PORTSMOUTH DR.	Lot 28	SFD				[] []
28 PORTSMOUTH DR.	Lot 45	SFD		님		helmed"
3 PORTSMOUTH DR.		SFD		W		
31 PORTSMOUTH DR.	Lot 29	SFD		님		
32 PORTSMOUTH DR.	Lat 43	SFD		జ		
35 PORTSMOUTH DR.	Lot 30	SFD		نسا		L-J
36 PORTSMOUTH DR.	Lot 44	SFD				
39 PORTSMOUTH DR.	Lot 31	SFD		Lil		L-1
40 PORTSMOUTH DR.	Lot 33	SFD		జ		
43 PORTSMOUTH DR.	Lot 32	SFD				ļi
47 PORTSMOUTH DR.		SFD				H
51 PORTSMOUTH DR.		SFD		L.		
52 PORTSMOUTH DR.		SFD				
55 PORTSMOUTH DR.		SFD		L		
56 PORTSMOUTH DR.		SFD				H
59 PORTSMOUTH DR.		SFD				Barried Co.
60 PORTSMOUTH DR.		SFD		hui tud		
63 PORTSMOUTH DR.		SFD		님		H
64 PORTSMOUTH DR.		SFD		니		H
67 PORTSMOUTH DR.		SFD				
68 PORTSMOUTH DR.		SFD				
7 PORTSMOUTH DR.		SFD		П		
71 PORTSMOUTH DR.		SFD		님		
72 PORTSMOUTH DR.		SFD		L.J		n
75 PORTSMOUTH DR.		SFD				No. of the last of
76 PORTSMOUTH DR.		SFD				
83 PORTSMOUTH DR.		SFD		님		
87 PORTSMOUTH DR.		SFD				
88 PORTSMOUTH DR.		SFD		님		2
91 PORTSMOUTH DR.		SFD				9
92 PORTSMOUTH DR.		SFD		Li		
95 PORTSMOUTH DR.		SFD				님
96 PORTSMOUTH DR.		SFD				
99 PORTSMOUTH DR.		SFD		Li		

Page 32 of 48

Address	Suite	Business Name	Five Year Test Date	Central Station Monitoring Req?	Excluded Next from Insp Date Schedule?
100 PROFESSIONAL CENTER DR.		BUILDING SHELL	2/7/2018	П	
200 PROFESSIONAL CENTER DR.		BUILDING SHELL	2/7/2018	ō	
400 PROFESSIONAL CENTER DR.		BUILDING SHELL	2/7/2018	ā	
500 PROFESSIONAL CENTER DR.		BUILDING SHELL	2/7/2018		ä
600 PROFESSIONAL CENTER DR.		BUILDING SHELL	2/7/2018	ā	
1 RANCH DR.		SFD	2772010	ñ	Ö
10 RANCH DR.		SFD			
101 RANCH DR.	Lot 39	SFD			
13 RANCH DR.	201.00	SFD		~	
14 RANCH DR.		SFD			B
17 RANCH DR.		SFD			
18 RANCH DR.		SFD			
200 RANCH DR.	Lot 77	SFD		m	Ö
201 RANCH CT.		Single Family Dwelling			
205 RANCH CT.		SFD			
205 RANCH CT.		Single Family Dwelling		m	
209 RANCH CT.		SFD			
21 RANCH DR.		SFD			
210 RANCH CT.		Single Family Dwelling			
213 RANCH CT.		Single Family Dwelling			
214 RANCH CT.		Single Family Dwelling			
22 RANCH DR.		SFD			
25 RANCH DR.		SFD			
26 RANCH DR.		SFD			
29 RANCH DR.		SFD			
30 RANCH DR.	Lot 93	SFD			
33 RANCH DR.	Lot 15	SFD			
34 RANCH DR.	Lot 92	SFD			
37 RANCH DR.	Lot 16	SFD			
38 RANCH DR.	Lot 91	SFD			
41 Ranch Dr	Lot 25	SFD			
42 RANCH DR.	Lat 90	SFD			
45 RANCH DR.	Lat 24	SFD			
46 RANCH DR.	Lot 89	SFD			
49 RANCH CT.	Lat 26	SFD			
5 RANCH DR.		SFD			
50 RANCH DR.	Lot 88	SFD			
53 RANCH CT.	Lot 27	SFD			L.
54 RANCH DR.	Lot 87	SFD			
57 RANCH CT.	Lot 28	SFD			English Control
58 RANCH DR.	Lot 86	SFD			
6 RANCH DR.		SFD			P-79
61 RANCH CT.	Lot 31	SFD			
65 RANCH CT.	Lot 30	SFD			L
66 RANCH DR.	Lot 84	SFD			님
69 RANCH CT.	Lot 29	SFD			
73 RANCH DR.	Lot 32	Single Family Dwelling			
74 RANCH DR.	Lot 82	SFD			
77 RANCH DR.		Single Family Dwelling			
81 RANCH DR.		Single Family Dwelling			
85 RANCH DR.		Single Family Dwelling		님	
89 RANCH DR.		Single Family Dwelling			니

Page 33 of 48

Address	Suite	Business Name	Five Year Test Date	Central Station Monitoring Req?	Next Insp Date	Excluded from Schedule?
9 RANCH DR		SFD				П
93 RANCH DR.		Single Family Dwelling		Ö		
97 RANCH DR.		SFD		$\overline{}$		
5 Ranch Drive Lot 8	Plan 2	Town Home		n		H
102 RANDOLPH DR.	7 1011 2	SFD				Ħ
104 RANDOLPH DR.		SFD		Ä		Ħ
22 RANDOLPH DR.		SFD				H
24 RANDOLPH DR.		SFD		H		H
2 RANDOLPH DR.		SFD				H
44 RANDOLPH DR.		SFD		H		H
				H		H
6 RANDOLPH DR.		SFD		H		L
8 RANDOLPH DR.		SFD				H
32 RANDOLPH DR.		SFD		in a		1000
4 RANDOLPH DR.		SFD				
66 RANDOLPH DR.		SFD		land projection of the second		اسا
8 RANDOLPH DR.		SFD		H		님
32 RANDOLPH DR.		SFD		land.		land made
4 RANDOLPH DR.		SFD				
6 RANDOLPH DR.		SFD		닖		
REBECCA WAY		SFD				
16 REBELO LN.		SFD				
02 RED HAWK RD		BUILDING SHELL		and a		
00 REDWOOD BL		Pell Plaza Building Shell	8/15/2016	~		
2	714					
900 REDWOOD BL		Vacant				
04 Redwood Blvd	1st Floo	Bank of Marin		✓		
04 Redwood Blvd		Pell Development Bldg Shell	8/15/2016			
604 REDWOOD BLVD	3RD FL	BROWN & BROWN				
604 REDWOOD BL	310	houseplans.com		£]		
6090 REDWOOD BL	BLDG E	BELLUCCI REALTY				
090 REDWOOD BL	BLDG F	ASSOCIATED CHIROPRACTICS				
2	608					
1090 REDWOOD BL	BLDG A	WHO DOES YOUR DOG?				
090 Redwood Blvd	н	SUPER BUFFET				
090 REDWOOD BLVD.		MARIN COMMUNITY CLINIC OFFICES		•		
3090 REDWOOD BL	BLDG B	AMEN				
090 REDWOOD BL		BUILDING SHELL	3/3/2014	✓		
3	780					
100 REDWOOD BL		MARIN COMMUNITY CLINICS - NOVATO	3/31/2014	~		
RISER LOCATE	D INSIDE OF BLDG.	AT SW CORNER OF LOBBY.				
965 REDWOOD BL		NORTHBAY CHRISTIAN ACADEMY	7/26/2012		1/1/2014	
025 REDWOOD BL		NOVATO FIRE PROTECTION	8/29/2010	~		
		DISTRICT				
049 REDWOOD BL		BUILDING SHELL	2/11/2015	houl		 J
	660			F		
075 REDWOOD BL		BUILDING SHELL	10/18/2015			딮
077 REDWOOD BL		Vacant (was Harley Dealership)				
7077 REDWOOD BL		SOUTH NOVATO ANIMAL HOSPITAL	4/7/2016	₩		
100 REDWOOD BL	102 / 10	NORTH MARIN CHIROPRACTIC CTR				
100 REDWOOD BL	101	ADP				
100 REDWOOD BL	100	Call & Metcatfe		[77]		6

Page 34 of 48

						Excluded
Address	Suite	Business Name	Five Year Test Date	Central Station Monitoring Req?	Next Insp Date	from Schedule?
7100 REDWOOD BL	200	STAIR, PEDERSEN AND WILLIAMS				
7100 REDWOOD BL		Building Shell	6/13/2017	✓		
7100 REDWOOD BL	201	CHARLES A. DAVIS ATTY	0.1012011			
7110 REDWOOD BL	20.	BUILDING SHELL	6/13/2017			
PER LJ, DO NOT SEND AM		NOTICE UNTIL AFTER 6/30/12. ASTITO YORK BEING COMPLETED IN THE NEX	O INSPECT 6/		AILED	havi
7135 REDWOOD BL	3/20/12. W	JACK IN THE BOX	COUPLEO	VEEKS. GF		
7200 Redwood Blvd.		BUILDING SHELL	5/11/2014	ñ		Ö
3309		DOIEDHAG GLEEC	3/1/2014	hand		
7200 REDWOOD BL	200822	KAISER PERMANENTE				
7200 REDWOOD BL	320	VACANT		Ħ		i-mi
7200 REDWOOD BL		, GHIRADO		rii.		H
				H		red red
7200 REDWOOD BL	400	MCNEIL INSURANCE AGENCY INC.		~		H
7250 REDWOOD BL		WOODSIDE OFFICE CENTER LLC	4/12/2018	9K.1		l-ui
2715	_			***		
7320 REDWOOD BLVD.	Α	PEET'S COFFEE		L.J.		-
7320 REDWOOD BLVD.	В	SMASHBURGER		~		Land
7320 REDWOOD BL		BUILDING SHELL		~		
4730				600		printer.
7325 REDWOOD BL		ONE STOP AUTO REPAIR	3/1/2007			
7400 REDWOOD BL		TRESCH GALLERIA	12/13/2017	✓.		
7417 REDWOOD BL		NOVATO 76 AUTOMOTIVE	10/11/2010			
1018						
7426 REDWOOD BL		BUILDING SHELL	5/16/2017			
7430 REDWOOD BLVD	E	POOL SCENE NOVATO	5/19/2017			
1998						
7430 REDWOOD BLVD	D	POOL SCENE, INC	5/19/2017			
7514 Redwood BI		TRADER JOES	7/27/2016			
6/14/11; Fire Safety Supply GF	completed	d 5 yr. inspection in 2010. Bildg owner will	contact them	to forward the cert	to us.	
7514 Redwood Bl	104	PHARMACA				
7595 REDWOOD BL		BUILDING SHELL	6/3/2016			
2398						
7595 REDWOOD BL	106	NOVATO ENDOSCOPY CENTER				
7595 REDWOOD BL	104	CONTAINER PROVIDERS INC				
7595 REDWOOD BL	107	JEFF D. CAUSEY, DDS				
7595 REDWOOD BL	200	RONIN ENTERTAINMENT/BONSAI				
7595 REDWOOD BL	207	MARTIN STERN & ASSOCIATES				
7595 REDWOOD BL	215	HINES&JONES/BRIAN PROSSER CPA				
7599 REDWOOD BL	214	HERONGATE PROPERTIES INC				
7599 REDWOOD BL	100/101	H&R BLOCK				
7599 REDWOOD BL		BUILDING SHELL	6/3/2016	50		
2399						
7599 REDWOOD BL	212	VISTA				
7599 REDWOOD BL		GRANCELL, LEBOVITZ ATTNYS				
7599 REDWOOD BL	210	TELFER, CHISEA, ARCHITECTS		Ö		Ö
7599 REDWOOD BL	209	BLASLAND, BOUCK, AND LEE INC.				Ö
7599 REDWOOD BL	200	REMARK GROUP CREATIVE SERVICES				
7600 REDWOOD BL		AMERICA'S BEST VALUE INN - NOVATO	3/26/2015	✓	1/1/2012	
Inspection completed, Wait	ing for co	rect cert, from Fire King, GF 3/25/10				

Page 35 of 48

Address	Suite	Business Name	Five Year Test Date	Central Station Monitoring Req?	Next Insp Date	Excluded from Schedule?
7655 REDWOOD BL		BUILDING SHELL	5/10/2017			
5/9/12: REPORT REC'D - F/	AILED DU	JE TO DEFICIENCIES. LETTER MAILED	. GF			
7665 REDWOOD BL	250	FACILITIES AND SERVICES CORP				
7665 REDWOOD BL		BUILDING SHELL	5/15/2017	✓		
	All ED DL	JE TO DEFICIENCIES. LETTER MAILED		000		List.
7665 REDWOOD BL	100	HARDING LAWSON ASSICIATES				
8001 REDWOOD BL	100	BUCK CENTER FOR AGE		7		in in
6001 REDWOOD BL		RESEARCH		(3)		
1083						
8171 REDWOOD BL		BIRKENSTOCK	1/15/2015			
5 yr. certs handled by Birker	nstock. G	F 11/30/09				2000
8950 REDWOOD HY	1010011.	REDWOOD LANDFILL		⊘		
30 REEDLANDS WOODS WAY		SFD		n		m
832 REICHERT AVE.		SFD		Ħ		Ħ
836 REICHERT AVE.		SFD		m		n
		MILLWORKS/NOVATO CONDOS		H	414.0040	H
900 REICHERT AVE.		MILLWORKS/NOVATO CONDOS		Luji	1/1/2012	61
4414		TO MANUEL MANAGEMENT		100		
50 RICA VISTA		TRUMBULL MANOR	3/25/2018	L.J	1/1/2012	L.J.
7/2/12: ASTI scheduled to in	ispect sys			P-9		enny
4 RICHARDSON WAY		SFD				딢
8 RICHARDSON WAY		SFD				200
445 RIDGE RD.		NEIL RESIDENCE				
481 RIDGE RD.		SFD				
101 ROBLAR DR		TOSCALITO TIRES				
101 ROBLAR DR		BUILDING SHELL	11/21/2016			
NEED TO INSPECT ALL SU 8/8/08.	JITES FO	R RISERS. TOSCALITO TIRE ONLY BU	SINESS WIT	H 5 YR, CERT, GF	7	
129 ROCK ROSE DR.		SFD				
10 ROWE RANCH WAY	Lot 66	SFD		-		-
10 ROWE RANCH DR.	Lot 31	Balle Terre		100		
11 ROWE RANCH WAY	Lot 47	SFD		H		片
12 ROWE RANCH CT.	Lot 42	Single Family Dwelling		M		i5
14 ROWE RANCH DR.	Lot 30	SFD				
15 ROWE RANCH WAY	Lot 48	SFD		띮		ii
16 ROWE RANCH CT.		Single Family Dwelling		느		님
17 ROWE RANCH WAY		SFD		£l		
18 ROWE RANCH DR.	Lot 29	Belle Terre		늰		L
19 ROWE RANCH WAY	Lot 49	SFD		닐		
2 ROWE RANCH DR.		SFD				
2 ROWE RANCH WAY		SFD				
21 Rowe Ranch Ct	Lot 35	Single Family Dwelling				
21 ROWE RANCH WAY	Lot 13	SFD				
22 ROWE RANCH DR.	Lot 24	SFD				
22 ROWE RANCH WAY	Lot 65	SFD				
23 ROWE RANCH WAY	Lot 50	SFD				
24 ROWE RANCH WAY		SFD				
25 ROWE RANCH CT.	Lot 36	Single Family Dwelling				
25 ROWE RANCH WAY	Lot 14	SFD				
26 ROWE RANCH DR.	Lot 23	SFD				
25 ROWE RANCH WAY	Lot 64	SFD				
27 ROWE RANCH WAY	Lot 51	SFD		ñ		П
28 ROWE RANCH WAY	20.0	SFD		m		m
29 ROWE RANCH CT.	Lot 37	Single Family Dwelling		ā		П

Page 36 of 48

Address	Suite	Business Name	Five Year Test Date	Central Station Monitoring Reg?	Next Insp.Date	Excluded from Schedule?
29 ROWE RANCH WAY	Lot 15	SFD				
3 ROWE RANCH WAY	LOC 15	SFD		Ä		H
	1-1-00	SFD		<u> </u>		B
30 ROWE RANCH WAY	Lot 63 Lot 52	SFD				H
31 ROWE RANCH WAY 32 ROWE RANCH DR.	Lot 22	SFD		m		m
						Ħ
33 ROWE RANCH CT.	Lot 38	Single Family Dwelling SFD		H		H
33 ROWE RANCH WAY 35 ROWE RANCH WAY	Lot 16 Lot 53	SFD		H		H
		SFD		177		m
36 ROWE RANCH DR.	Lot 21			H		H
37 ROWE RANCH DR.	Lot 17	SFD		m		177
38 ROWE RANCH WAY	Lot 61	SFD		-		
39 ROWE RANCH WAY	Lot 54	SFD		(1,l 217
4 ROWE RANCH CT.		SFD				岩
40 ROWE RANCH DR.	Lot 20	SFD		[]		
41 ROWE RANCH DR.	Lot 18	SFD				
42 ROWE RANCH WAY	Lot 60	SFD				님
43 ROWE RANCH WAY	Lot 55	SFD		L.J		
44 ROWE RANCH DR.	Lot 19	ŞFD				
46 ROWE RANCH WAY	Lot 59	SFD				
47 ROWE RANCH WAY	Lot 56	SFD				
50 ROWE RANCH WAY	Lot 58	SFD				
6 ROWE RANCH DR.	Lot 32	SFD				
6 ROWE RANCH WAY	Lot 67	SFD				
7 ROWE RANCH WAY		SFD				
7 Rowe Ranch Way	Lo! 46	SFD				
8 ROWE RANCH CT.	Lot 43	Single Family Dwelling				
34 ROWE RANCH WAY Way	Lot 62	SFD				
100 Rowland Way	310	NCH-Physical Therapy and Sports Fitness		✓		
100 ROWLAND WY	200	SPEC SUITE		✓		
100 ROWLAND WY		BUILDING SHELL				
Deficiences noted on 5/3 NEED TO PROVIDE CEI		30 day letter mailed 10/24/06 dc. REMOD COMPLETED. GF 8/7/08.	DELING IN P		Τ	
100 Rowland Wy		SUTTER MEDICAL CAMPUS/BUILDING SHELL	8/24/2011	~		
4162				F79		
101 ROWLAND WY		SUTTER MEDICAL	8/24/2011	×		il
2676		CAMPUS/BUILDING SHELL				
		MOVIAN'S Browing Co. 14d	10/8/2013	m		m
15 ROWLAND WY		MOYLAN'S Brewing Co., Ltd	10/4/2013			LI
2073		NOVATO COMMINENT LICEDITA	21110010	[7]	4/4/0044	m
180 ROWLAND WY		NOVATO COMMUNITY HOSPITAL	3/1/2016	-	1/1/2011	H
180 ROWLAND BL		TACO BELL	6/1/2002	had		L)
	nication is b	eing done and will fax the information over		-		rm.
35 ROWLAND WY		CARLS JUNIOR (CHICK-FIL-A)	4/25/2012	-		
44 ROWLAND WY		CENTURY THEATER #472	12/11/2014			
524				F79		
55 ROWLAND WY		STAPLES	6/16/2014	✓		
65 ROWLAND WAY		MANCINI'S SLEEP WORLD				
75 ROWLAND WAY		BUILDING SHELL	11/3/2015	✓		

4571						
75 ROWLAND WAY	120825	ROSENTHAL & CO.		⊘		

Page 37 of 48

******	O-it-	Duningen Name	Five Year	Central Station	Next	Excluded from
Address	Suite	Business Name	Test Date	Monitoring Req?	Insp Date	Schedule?
75 ROWLAND WAY	100 C	BEI GATEWAY		~		
75 ROWLAND WY		UNIVERSITY OF PHOENIX		~		
88 ROWLAND WAY	2ND FL	COUNTY OF MARIN CHILD SUPPORT SERVICES		2		
88 ROWLAND WY		ROWLAND PLAZA OFFICE BLDG	11/3/2015	✓		
1	205					
88 Rowland Wy	250	Sport and Spine Therapy of Marin				
88 Rowland Way		Pro Mortgage				
88 ROWLAND WAY	275/350	PACIFIC PULMINARY		~		
95 ROWLAND WY		Novato Fire Protection District Admin. Office	9/5/2010	✓		
2	085	onice .				
100 RUSH LANDING RD		BUILDING SHELL	12/12/2011			
200 RUSH LANDING RD		BRAYTON-PURCELL	12/12/2011			
	530					
300 Rush Landing Rd		Public Storage, Inc.				
600 RUSH LANDING RD		ENTERPRISE RENT-A-CAR	1/25/2016			
	387					
180 SADDLE WOOD DR.		SFD				
3 SADDLEBROOK CT.		SFD				
3 SADDLEBROOK CT.		SFD		П		
170 SADDLEWOOD DR.		SFD		m		Ö
220 SADDLEWOOD LN.		SFD				Ä
42 SAGE CT.		SFD		m		m
47 SAGE CT.		SFD		П		Ħ
105 SAMROSE DR.		SFD		ñ		m
20 SAMROSE DR.		SFD		H		H
55 SAMROSE DR.		SFD		H		Ħ
65 SAMROSE DR.		SFD		H		H
75 SAMROSE DR.		SFD				m
85 SAMROSE DR.		SFD		177		H
10 SAN ALESO CT.		SFD				H
40 SAN ALESO CT.		SFD		[11]		\$00d
131 SAN ANDREAS DR.		SFD				H
				tud proj		Seed Seed
351 SAN ANDREAS DR		Meridian Sports Club (Rolling Hills)	4/29/2009			
	g completed inspectio	on on 7/09. They will send us the report.		m		
101 San Antonio Rd		Institute of Noetic Sciences	1/1/2012			님
2 SAN ANTONIO RD.		NORTH BAY KOREAN AMERICAN PRESBYTERIAN CHURCH				-
201 San Antonio Rd		Burdell Subdivion(Novato/Petaluma) was 1 Burdell				il
15 SAN CARLOS WAY		SFD				
234 SAN CARLOS AVE.		SFD				
101 SAN MARIN DR NUMBER OF RI		BUILDING SHELL	9/10/2013			
123 SAN MARIN DR		VACANT		~	12/1/2004	П
127 SAN MARIN DR		STARBUCKS		m	12/1/2004	Ħ
130 SAN MARIN DR		VERIZON WIRELESS		m	12/1/2004	
15 SAN MARIN DR		SAN MARIN HIGH SCHOOL	7/28/2015	H	1/1/2012	H
	t Mond attention tatte		1128/2015	hod	17172012	load
155 SAN MARIN DR		r to correct #1. 5/23/06 Jim G. all o.k. HARVEST MARKET	1/15/2013			
	060					Visite.
155 San Marin		AT & T				

Page 38 of 48

Address	Suite	Business Name	Five Year Test Date	Central Station Monitoring Reg?	Next Insp Date	Excluded from Schedule?
191 SAN MARIN DR		TUESDAY MORNING INC			1/1/2004	
200 San Marin Dr		COMMERCIAL BLDG.		~	17.77.20.0	
	97	COMMENCE DEDG.		-		
264 SAN MARIN DR		SFD		m		m
505 SAN MARIN DR		BUILDING "A"	6/27/2016			m
	OPERTY MANAGE	R, INSPECTION SCHEDULED FOR 8/3		0.27		
505 SAN MARIN DR	or Erri mario de Er	BUILDING 'B'	6/27/2016			П
	OPERTY MANAGE	R. INSPECTION SCHEDULED FOR 8/3		total		
733 SAN MARIN DR	OI EITH MAINTE	CTUIT		~		F3
773 SAN MARIN DR	Bidg 2		10/25/2017	V		m
	63	THE MITTOR CHES	TOLEGIEST			
773 SAN MARIN DR.	FL3	TRAVEL SMITH		[77]		[7]
775 SAN MARIN DR		FIREMAN'S FUND	10/25/2017	Ħ		
777 SAN MARIN DR	Bidg. 1	FIREMAN'S FUND INSURANCE CO	10/25/2017	m		[7]
779 SAN MARIN DR		FIREMAN'S FUND	10/25/2017	H		H
1 SAN PABLO CT.	Lat 1	SFD	1012012017	H		ñ
10 SAN PABLO CT.	Lot 15	SFD		H		177
11 SAN PABLO CT.	Lot 6	SFD		Ħ		H
12 SAN PABLO CT.	Lot 14	SFD		land land		[m]
14 SAN PABLO CT.	Lat 13	SFD		H		ii ii
15 SAN PABLO CT.		SFD		-		m
16 SAN PABLO CT.	Lot 7	SFD		m		m
17 San Pablo Ct	Lot 12				1/1/2011	H
18 SAN PABLO CT.	Lot 8 Lot 11	Denia Campos Brasil SFD		m	1/1/2011	m
19 SAN PABLO CT.		SFD				H
	Lot 9			m		
2 SAN PABLO CT.	Lot 19	SFD		H		H
20 SAN PABLO CT.	Lot 10	SFD				H
3 SAN PABLO CT.	Lot 2	SFD				뭄
4 SAN PABLO CT.	Lot 18	SFD		H		H
5 SAN PABLO CT.	Lot 3	SFD		님		H
6 SAN PABLO CT.	Lol 17	SFD		H		금
7 SAN PABLO CT.	Lot 4	SFD		L		Lud md
8 SAN PABLO CT.	Lot 17	SFD		H		님
9 SAN PABLO CT.	Lot 5	SFD		L		land (mg
65 SAN RAMON WAY		NFPD STATION 3	9/5/2010	H		듬
600 SANTANA RD.		SFD		12		land p-reg
604 SANTANA RD.		SFD		님		님
644 SANTANA RD.		SFD		Li		L
449 School Rd		SFD		님		had
1013 SECOND ST		FRANK HOWARD ALLEN	5/10/2017			님
1120 SECOND ST		CEDARS SECOND STREET			10/1/2011	
1015 SEVENTH ST		NOVATO UNIFIED SCHOOL DIST	2/16/2016			1
	60			179		_
1024 Seventh St		GILEAD HOUSE		2		land proj
1130 SEVENTH ST		NOVA-RO II	1/23/2018	~	1/1/2013	
	59			grang		_
1333 SEVENTH ST		BUCKELEW HOUSE	5/11/2017	1	10/1/2009	L_j
	18			4****		
930 SEVENTH ST		TACO BELLIPIZZA HUT	3/1/2007			
	49			-		1000
936 SEVENTH ST		BUILDING SHELL	2/1/2011			

Page 39 of 48

Address	Suite	Business Name	Five Year Test Date	Central Station Monitoring Req?	Next Insp Date	from Schedule?
940 SEVENTH ST		ENCANTO	1/1/2005			
554						
950 SEVENTH ST		Novato Gymnastics & Teen Center	4/17/2011			
4 SHARI CT.		SFD				
2 SHEP CT.	Lot 1	SFD				
4 SHEP CT.	Lot 2	SFD				m
6 SHEP CT.	Lot 3	SFD				
7 SHEP CT.	Lat 4	SFD				
901 Sherman Ave		City of Novato	10/9/2014	✓		F
3731		0.17 0.7101010	707252			
73 SHIELDS LN.		SED				m
10 SILVER MAPLE CT.		SFD		n		
2 SILVER MAPLE DR.		SED		ñ		n
6 SILVER MAPLE CT.		SFD		m		Ħ
7 SILVER MAPLE CT.		SFD		ā		ñ
8 SILVER MAPLE CT.		SFD		m		m
9 SILVER MAPLE DR.		SFD		H		Ħ
11 SILVERBERRY CT.	Lot 320	47.5				ŏ
12 SILVERBERRY CT.	Lot 322					
15 SILVERBERRY CT.	Lot 321			H		
4 SILVERBERRY CT.	Lot 324			100		
7 SILVERBERRY CT.	Lot 319			H		
8 SILVERBERRY CT.	Lot 323	T		m		[m]
	LOI 323	SFD		m		H
1197 SIMMONS LN. 10 SONORA CT.				-		F-7
11 SONORA CT.		Miller Residence SFD		H		
				H		
3 SONORA CT.		SFD		m		pros.
6 SONORA CT.		SFD		H		
7 SONORA CT.		SFD		~		L.J
South end of Rowland Blvd		Hanna Ranch		~		님
1370 SOUTH NOVATO BL		NOAH'S ARK PRESCHOOL	6/11/2017	L.J	1/1/2009	L.i
1370 South Novato BI		NEW LIFE CHRISTIAN CENTER Church/School	6/11/2017		1/1/2010	Li
1390 SOUTH NOVATO BL		NOVATO SHELL MCD/CORP		✓		L
1430 SOUTH NOVATO BL		ARMSTRONG GARDEN CENTER	8/29/2013	invi		Li
1654				-		
1470 SOUTH NOVATO BL		ANTON POINTE CARE FACILITY	4/6/2012	LJ.	10/1/2011	
1533 SOUTH NOVATO BL		NAVE SELF STORAGE	6/21/2011			
1651				5100		400
1535 SOUTH NOVATO BL	Α	Pini Hardware	2/8/2013	~		
421						
1535 SOUTH NOVATO BLVD		GROCERY OUTLET		~		
1561 SOUTH NOVATO BL		BUILDING SHELL	10/3/2012			
1565 SOUTH NOVATO BL	A & B	ROUND TABLE PIZZA	2/12/2015		1/1/2010	
This building only is 1565	S. Novato B	lvd. A & B. All other building in this con	nplex has sepa	rate owners.		
1565 SOUTH NOVATO BL		CAGWIN & DOWARD LANDSCAPE CONTRACTORS	2/12/2015			
1575 South Novato Blvd.	. 15.11905	Edgewater Condominiums of Novato	1/31/2017			
INDIVIDUALLY OWNED	UNITS			F=0		-
1586 SOUTH NOVATO BL		GOLDEN GATE BRIDGEWORK	7/8/2013	닖		
1599 SOUTH NOVATO BL	400	BRIDGECREEK APARTMENTS	4/8/2016	1.1	1/1/2013	1.1

Page 40 of 48

Address	Suite	Business Name	Five Year Test Date	Central Station Monitoring Req?	Next Insp Date	Excluded from Schedule?
227 SOUTH OAKWOOD DR	Suite	US COAST GUARD HOUSING	3/10/2016	Monitoring Next	wak Mark	
		OFFICE				
Deficiences found and out again.	have not been	corrected. Letter sent 8/31/04. In the pro-	cess1/5/05. L	M 2/7/06 dc. Send	letter	
South Palm Dr	Bldg. 50	Hamilton Town Center(Hamilton Field)	11/12/2014			
South Palm Dr	_	Hamilton Town Center(Hamilton Field)	11/12/2014			
South Palm Dr	Bldg. 50	Hamilton Town Center(Hamilton Field)	11/12/2014			
400 South Palm Dr		VILLAS AT HAMILTON	7/21/2013		1/1/2014	
1807						
410 South Palm Dr		VILLAS AT HAMILTON	7/21/2013		1/1/2013	
1607						
420 South Palm Dr		VILLAS AT HAMILTON	7/21/2013		1/1/2013	
2700						
503 South Palm		Hamilton Community Center	3/18/2013			
3217		•				
30 ST, ANDREWS DR.		SFD				
801 STATE ACCESS RD		801 STATE ACCESS SENIOR				
		APARTMENTS				
4306						
545 STONE DR.		SFD				
5 Stone Tree Lane		Maintenance Facility	6/11/2013			
2766						
9 STONE TREE LN.		STONETREE GOLF CLUB	10/31/2016	₹		
2122						
2 STONEHAVEN CT		Life House-Hamilton House	4/23/2013	✓		
2410						
103 STONETREE LN.	Lot 3D	SFD				
104 STONETREE LN.	Lot 42	SFD				
107 STONETREE LN.	Lot 31	SFD				
111 STONETREE LN.	Lot 32	SFD				
115 STONETREE LN.	Lot 33	SFD				
116 STONETREE LN.	Lot 41	SFD				
119 STONETREE LN.	Lot 34	SFD				
120 STONETREE LN.	Lot 40	SFD				
123 STONETREE LN.	Lot 35	SFD				
127 STONETREE LN.	Lot 36	SFD				
132 STONETREE LN.	Lot 37	SFD				
32 STONETREE LN.	Lot 53	Single Family Dwelling				
36 STONETREE LN.	Lot 52	SFD				
43 STONETREE LN.	Lot 17	SFD				
44 STONETREE LN.	Lot 50	SFD				
47 STONETREE LN.	Lot 16	SFD				-
48 STONETREE LN.	Lot 49	SFD				
49 STONETREE LN.		SFD				
51 STONETREE LN.	Lot 18	SFD				
52 STONETREE LN.	Lot 48	SFD				
55 STONETREE LN.	Lot 19	SFD				
56 STONETREE LN.	Lot 47	SFD				
59 STONETREE LN.	Lot 20	SFD				
2940						
63 STONETREE LN.	Lot 21	SFD				
64 STONETREE LN.	Lot 46	SFD				
68 STONETREE LN.	Lot 45	SFD		PT.		(ma)

Page 41 of 48

Address	Suite	Business Name	Five Year Test Date	Central Station Monitoring Req?	Next Insp Date	Excluded from Schedule?
75 STONETREE LN.	Lot 23	SFD				
79 STONETREE LN.	Lot 24	SFD				
3 STONETREE LN.	Lot 25	Renaissance @ Stonetree				
37 STONETREE LN.	Lot 26	SFD				
88 STONETREE LN.	Lot 44	Renaissance @ Stonetree				
91 STONETREE LN.	Lot 27	SFD				
22 STONETREE LN.	Lot 43	Renaissance @ Stonetree				
5 STONETREE LN.	Lot 28	SFD				m
99 STONETREE LN.	Lot 29	SFD				
9 SUNNY COVE DR.		SFD				
SUNNY COVE DR.		SFD		ñ		n
44 SUNNY COVE DR.		SFD				ā
IS SUNNY COVE DR.		SFD		[7]		m
2 SUNNY COVE DR.		SFD		77		
56 SUNNY COVE DR.		SFD		m		m
56 SUNNY COVE DR.		SFD		Ħ		
50 SUNNY COVE DR.		SFD		Ħ		Ħ
31 SUNNY COVE DR.		SFD		m		m
34 SUNNY COVE DR.		SFD		H		Ħ
55 SUNNY COVE DR.		SFD		m		m
88 SUNNY COVE DR.		SFD		ñ		
59 SUNNY COVE DR.		SFD		ñ		m
2 SUNNY COVE DR.		SFD		ñ		
3 SUNNY COVE DR.		SFD		ñ		
4 SUNNY COVE DR.		SFD		ñ		Ħ
6 SUNNY COVE DR.		SFD				ñ
30 SUNNY COVE DR.		SFD		H		Ħ
34 SUNNY COVE DR.		SFD				
788 SUTRO AVE.		SFD		m		
8 SYLVIA CREEK		SFD				
325 Tamalpais Ave	Lot2	SFD		ñ		Ö
330 TAMALPAIS AV	2012	CREEKWOOD SENIOR HOME	8/18/2013	~	1/1/2012	
2592		STEERINGS SERIOT TOME	D/10/2015	-		
321 TAMALPIAS AVE.		SFD		[7]		m
25 TAMALPIAS AVE.		SFD				
329 TAMALPIAS AVE.		SFD		n		n
346 TAMALPIAS AVE.		CONOVER RESIDENCE				
56 TAMALPIAS AVE.		SFD				
315 TAMALPIAS AVE.		SFD				
53 TAMALPIAS AVE		ATRIA TAMALPIAS CREEK		~	1/1/2009	
2593				-		
11 TAN OAK WAY		SFD				
2 TAN OAK WAY		SFD				
5 TAN OAK WAY		SFD				
6 TAN OAK WAY		SFD		Ö		
9 TAN OAK WAY		SFD				
TAN OAK WAY		SFD		Ö		
3 TAN OAK WAY		SFD		Ē		
4 TAN OAK WAY		SFD		Ö		
7 TAN OAK WAY		SFD		Ö		
TAN OAK WAY		SFD				

Page 42 of 48

			Five Year	Central Station	Next	Excluded from
Address	Suite	Business Name	Test Date	Monitoring Req?	Insp Date	Schedule?
7 TAN OAK WAY		SFD				
8 TAN OAK WAY		SFD				
28 TAN OAK WAY		SFD				
12 TARA LN.		SFD				
15 TARA LN.		SFD				
18 TARA LN.		SFD				
20 TARA LN.		SFD		Ö		
24 TARA LN.		SFD				
26 Terry Circle		SFD				
1053 THIRD ST.		SFD		n		
10 THUNDERBIRD DR.		SFD				
29 THUNDERBIRD DR.		SFD		77		m
34 THUNDERBIRD DR.		SFD		Ä		
41 Thunderbird Dr		SFD		TT.		ă
46 THUNDERBIRD DR.		SFD		H		H
2701 TIKI RD.		SFD				H
				H		H
102 TINKER WAY		SFD SFD				5J
105 TINKER WAY						H
108 TINKER WAY		SFD		님		듬
122 TINKER WAY		SFD		land proj		닖
124 TINKER WAY		SFD		H		
126 TINKER WAY		SFD		hard		L
128 TINKER WAY		SFD		Ц		d
22 Tinker Wy		North Bay Children's Center	3/17/2015	×	1/1/2011	
2734						
42 TINKER WAY		SFD				-
46 TINKER WAY		SFD		L.		
48 TINKER WAY		SFD		님		님
51 TINKER WAY		SFD		1		
53 TINKER WAY		SFD		Ц		
62 TINKER WAY		SFD				
64 TINKER WAY		SFD				
66 TINKER WAY		SFD				
71 TINKER WAY		SFD				
73 TINKER WAY		SFD				
82 TINKER WAY		SFD				Ē
84 TINKER WAY		SFD				
2700 TOPAZ DR.		SFD				
50 TRAILVIEW CT.		SFD				
15 TRUMAN DR.		SFD				8
560 TRUMBALL AVE.		SFD				
556 TRUMBULL AVE.		SFD		₹.		
10 TURNER DR.	Lot 313	SFD				
11 TURNER DR.	Lot 325	SFD				
14 TURNER DR.	Lot 312					
15 TURNER DR.	Lot 326					
18 TURNER DR.	Lot 311			Ö		
19 TURNER DR.	Lot 327			ö		ă
2 Tumer Dr		PRECIOUS MOMENTS		Ħ	1/1/2011	
	Lot 310	SFD		[m]	1102011	
22 TURNER DR.				H		Ħ
22 TURNER DR. 23 TURNER DR. 26 TURNER DR.		SFD		Ħ		Ä

Page 43 of 48

Address	Suite	Business Name	Five Year Test Date	Central Station Monitoring Req?	Next Insp Date	Excluded from Schedule?	
27 TURNER DR.	Lot 329	SFD					
3 TURNER DR.	Lot 316	SFD					
30 TURNER DR.	Lot 308	SFD					
31 TURNER DR.	Lot 330	SFD					
34 TURNER DR.	Lot 307	SFD					
35 TURNER DR.	Lot 331	SFD					
39 TURNER DR.	332	SFD					
6 TURNER DR.	Lot 314	SFD					
7 TURNER DR.	Lot 317						
26 TWIN CREEKS CT.		SFD					
34 TWIN CREEKS CT.		SFD					
38 TWIN CREEKS CT.		SFD					
15 TYLER ST.		SFD					
12 UPLAND LN.		SFD					
1021 VALLE VIEW CT.	LOT 8	SFD					
1025 VALLE VIEW CT.	Lot 9	SFD					
1029 Valle View Ct	Lot 10	SFD					
1030 Valle View Ct	Lot 18	SFD					
1033 VALLE VIEW CT.	LOT 11						
1034 Valle View Ct	Lat 17	SFD					
1038 VALLE VIEW CT.	LOT 16	SFD					
1042 VALLE VIEW CT.	LOT 15	SFD					
1046 VALLE VIEW CT.	LOT 14	SFD					
1050 VALLE VIEW CT.	LOT 13	SFD					
1054 VALLE VIEW CT.	LOT 12	SFD					
1602 Valtejo ST	Lot 1	SFD					
1022 VALLEY VIEW CT.	Lot 20	SFD					
1026 VALLEY VIEW CT.	Lot 19	SFD					
11 VALLEYVIEW TERRACE	Lot 304	SFD					
12 VALLEYVIEW TERRACE	Lot 301	SFD					
15 VALLEYVIEW TERRACE	Lot 303	SFD					
16 VALLEYVIEW TERRACE	Lot 300	SFD					
19 VALLEYVIEW TERRACE	Lot 302	SFD					
20 VALLEYVIEW TERRACE	Lot 299	SFD					
24 VALLEYVIEW TERRACE	Lot 298	SFD					
7 VALLEYVIEW TERRACE	Lot 305	SFD					
17 VILLA MARIA		SFD					
20 VINCENT LN.		SFD					
2121 VINEYARD RD.		SFD					
2254 VINEYARD RD.		SFD					
2281 VINEYARD RD.		SFD					
2288 VINEYARD RD.		SFD					
2413 VINEYARD RD.		SFD					
2550 Vineyard Rd		SFD					
2825 VINEYARD RD.		SFD		0			
3100 Vineyard Rd		SFD					
100 VINTAGE WY		MACY'S HOME CENTER	6/1/2008			- 2	
NFPD: GF 12/15/08: PER S ACECPTED, AND WHEN W REPORT TO GF.	SIMPLEX	TION SCHEDULED FOR 9/25/08. GF AT GRINNELL, WAITING TO HEAR FROM DEFICIENCIES CAN BE COMPLETED.	MACY'S AS	TO WHETHER BID			
104 VINTAGE WY	A7	WILD BIRDS UNLIMITED					
104 VINTAGE WY	A9	EXTREME PIZZA					

Page 44 of 48

Address	Suite	Business Name	Five Year Test Date	Central Station Monitoring Req?	Excluded Next from Insp Date Schedule?
104 VINTAGE WY	A1	SUBWAY		[7]	[7]
104 VINTAGE WY		BULIDING SHELL	9/10/2013		
	COME EDOM	VINTAGE OAKS MGMT.	5/10/2015	1,00	had
				-	F3
104 VINTAGE WY	A2/A5	BEVERAGE & MORE	710010000	H	l-col
105 VINTAGE WY		SILVEIRA PONTIAC, BUICK, GMC	7/20/2009	100	Load
		by Novato Toyota, GF		-	
108 VINTAGE WY	B1	PIER 1 IMPORT	9/10/2013	L.J	Lad.
		VINTAGE OAKS MGMT.			_
112 VINTAGE WY	C3	Sushiholic		Li	L.
112 VINTAGE WAY		BUILDING SHELL	9/10/2013		
112 VINTAGE WY	C1	PAYLESS SHOE SOURCE			
SPRINKLER CERTS	COME FROM 1	VINTAGE OAKS MGMT.			
115 VINTAGE WY		NOVATO TOYOTA	8/14/2017		
116 VINTAGE WY	2A/B	ROSS DRESS FOR LESS	9/10/2013		
		VINTAGE OAKS MGMT.			
120 VINTAGE WAY	D 5/7	SEE'S CANDY		T	П
	D 37	BUILDING SHELL	9/10/2013	m	i
120 VINTAGE WY			9/10/2013	L	11
	COME FROM	VINTAGE OAKS MGMT.		52	P ^{ro} t
124 VINTAGE WY		VERIZON	2/28/2018	~	님
125 VINTAGE WY		MATT AND JEFFS CAR WASH	12/8/2014	L.	
1871					
128 VINTAGE WY		CHEVY'S FRESH MEX	3/1/2008	€	L.J
1/31/06 M.H. checked	riser tag for 5	year certification.			
132 VINTAGE WAY	7	GYMBOREE		✓	
132 VINTAGE WAY	5	TUTTIMELON			
132 VINTAGE WY	F 5.7. 9	WELLS FARGO			
132 VINTAGE WY		BUILDING SHELL	9/10/2013		
	COME FROM Y	VINTAGE OAKS MGMT.			
132 VINTAGE WY	F1	STARBUCKS		7	m
136 VINTAGE WY	E1	DSW	9/10/2013	n	H
			5/10/2013	boul	4-3
	COME FROM	VINTAGE OAKS MGMT.			
140 VINTAGE WY		BUILDING SHELL	9/10/2013	hool	il
		VINTAGE OAKS MGMT.			-
140 VINTAGE WY	G11	MARIN BEAUTY COMPANY		land.	-
200 VINTAGE WY		TARGET		✓	
204 VINTAGE WY		MARSHALLS	9/10/2013		
SPRINKLER CERTS	COME FROM \	/INTAGE OAKS MGMT.			
208 Vintage Way	F-11	Game Stop			
208 VINTAGE WY	K11B	STERLING VISION CARE			
208 VINTAGE WAY	9-11	JUSTICE			
208 VINTAGE WY	K11A	SITE FOR SORE EYES		[7]	
208 VINTAGE WY	K23	VINTAGE OAKS DENTAL GROUP		ñ	77
208 VINTAGE WY	K19	PARTY CITY			Ħ
				5ml 1773	H
208 VINTAGE WY	K25	MIRACLE EAR (WAS LA VITA CHIROPRACTIC CENTER)			
208 VINTAGE WY	K9	MARIN BEAUTY COMPANY		님	닏
208 VINTAGE WY		BUILDING SHELL	9/10/2013	ll	ll
4156					-
208 VINTAGE WY	K5	ANN TAYLOR			
208 VINTAGE WY	K1,2	PETCO	3/23/2014		
208 VINTAGE WY	K20	VINTAGE NAILS			

Page 45 of 48

Address	Suite	Business Name	Five Year Test Date	Central Station Monitoring Req?	Excluded Next from Insp Date Schedule?
208 VINTAGE WY	100	VINTAGE OAKS MANAGEMENT			
208 VINTAGE WY	K15	SUPERCUTS		Ö	
208 VINTAGE WY	K17	SPRINT			
208 VINTAGE WY	K7	CLAIRE'S			
208 VINTAGE WY	КЗ	SEPHORA			
212 VINTAGE WAY		BUILDING SHELL	9/10/2013		
	COME FROM	VINTAGE OAKS MGMT.			-
212 VINTAGE WY	L1	SPORTS AUTHORITY		~	
212 VINTAGE WY	L2	SHOE PAVILION		<u></u>	
216 VINTAGE WY		IN-N-OUT BURGER (WAS BURGER	3/13/2013	~	ñ
210 71111102 111		KING)			
220 VINTAGE WY		LESLIE'S POOL SUPPLY	8/12/2009		
5 yr. notices to Leslie's	Pool Supply.				
224 VINTAGE WAY		HOPMONK TAVERN	2/28/2017	✓	
1919					
228 VINTAGE WY		OLD NAVY CLOTHING CO.	9/10/2013	✓	
SPRINKLER CERTS C	OME FROM V	/INTAGE OAKS MGMT.			
232 VINTAGE WY		SLEEP TRAIN	9/10/2013		
SPRINKLER CERTS C	OME FROM \	/INTAGE OAKS MGMT.			
236 VINTAGE WY	P	MEN'S WEAREHOUSE	5/30/2013		
SPRINKLER INSPECT	IONS HANDL	ED BY VINTAGE OAK MGMT.			
251 VINTAGE WY		CHASE	9/1/2014		
300 VINTAGE WY		COSTCO WHOLESALE #141	11/14/2013	✓	
1778					
1871 VIRGINIA AVE.		SFD			
40 VIVIAN CT.		SFD			
6 WASHINGTON ST.		Nilsen Residence			
19 WATERBURY LN.		SFD			
23 WATERBURY LN.		SFD			
8 WATERBURY LN.		SFD			
3 WATRERBURY LN.		SFD			
45 WENDY CT.		SFD			
55 WENDY CT.		SFD			ā
60 WENDY CT.		SFD			
70 WENDY CT.		SFD			Ö
3 WEST BABERRY PL.	Lot 260	SFD			ā
11 WEST BARBERRY PL.	Lot 258	SFD			Ö
7 WEST BARBERRY PL.	Lot 259	SFD			
1 WHITE OAK WAY		SFD			
11 WHITE OAK WAY		SFD			
12 WHITE OAK WAY		SFD			
15 WHITE OAK WAY		SFD			
16 WHITE OAK WAY		SFD			
19 WHITE OAK WAY		SFD			
20 WHITE OAK WAY		SFD			
24 WHITE OAK WAY		SFD			
28 WHITE OAK WAY		SFD			
3 WHITE OAK WAY		SFD			ā
4 WHITE OAK WAY		SFD			
7 WHITE OAK WAY		SFD			
8 WHITE OAK WAY		SFD			
15 WILDWOOD LN.		SFD			

Page 46 of 48

Address	Suite	Business Name	Five Year Test Date	Central Station Monitoring Req?	Next Insp Date	Excluded from Schedule?
625 WILSON AVE.	- Julie	SFD	103t Date		.map crace	
		W 1 W 2	6420042	H		H
627 WILSON AV		SUNRISE HOUSE I (Life House)	5/13/2013			L.J
2596		cen		f**2		m
640 WILSON AVE.		SFD	4144.0045	H	********	H
680 WILSON AV		NOVATO YOUTH CENTER	1/11/2015	Lui	1/1/2014	had
#3 needs to be corrected.		INDIAN NATIONAL PROPERTY		F-3	400000044	77
684 WILSON AV		INDIAN VALLEY VIEW SFD		H	10/1/2011	
686 Wilson Ave	Laket					ä
1 WINDING WAY	Lot 1	SFD SFD		Y		H
10 WINDING WAY	Lat 10			LJ		
11 WINDING WAY	1 -4 4	SFD		H		ä
13 WINDING WAY	Lot 4	SFD		ted f ^{**} T		L.
14 WINDING WAY	Lot 9	SFD				
17 WINDING WAY	Lot 5	SFD				inal proj
2 WINDING WAY	Lot 12	SFD				H
25 WINDING WAY	Lot 7	SFD		[7-7]		hand promp
5 WINDING WAY	Lot 2	SFD				
6 WINDING WAY	Lot 11	SFD		님		H
9 WINDING WAY	Lot 3	SFD		ind my		Land prod
100 WINDWALKER WAY		SFD				H
101 WINDWALKER WAY		SFD		님		님
104 WINDWALKER WAY		SFD				[] []
105 WINDWALKER WAY		SFD		L		H
108 WINDWALKER WAY		SFD				
109 WINDWALKER WAY		SFD		닖		님
112 WINDWALKER WAY		SFD				L_3
116 WINDWALKER WAY		SFD		H		H
117 WINDWALKER WAY		SFD		iJ		Ħ
120 WINDWALKER WAY		SFD		H		
124 WINDWALKER WAY		SFD		1-1		H
128 WINDWALKER WAY		SFD		L-1		占
132 WINDWALKER WAY		SFD		1,)		6
133 WINDWALKER WAY		SFD		占		H
136 WINDWALKER WAY		SFD		L.,.i		
137 WINDWALKER WAY		SFD		님		H
141 WINDWALKER WAY		SFD				
145 WINDWALKER WAY 100 WOOD HOLLOW DR		SFD OFFICES (WAS GREEN POINT MORTGAGE)	7/26/2011	Z		
2150						
467 Wood Hollow Dr		SFD				
3012						
468 WOOD HOLLOW DR.		SFD				
11 WOODFERN CT.		SFD				
12 WOODFERN CT.		SFD				
15 WOODFERN CT.		SFD				
16 WOODFERN CT.		SFD				
19 WOODFERN CT.		SFD				
20 WOODFERN CT.		SFD				
23 WOODFERN CT.		SFD				
3 WOODFERN CT.		SFD				
4 WOODFERN CT.		SFD		F3		

Page 47 of 48

Address	Suite	Business Name	Five Year Test Date	Central Station Monitoring Req?	Next Insp Date	Excluded from Schedule?	
7 WOODFERN CT.		SFD					
8 WOODFERN CT.		SFD					
10 WOODVIEW LN.		SFD		0			
1241 YUKON WAY		SFD					
16 ZANCO WAY		SFD		=======================================			

Appendix D

Private Fire Protection Systems Installation Company Interview List

AAA Fire Protection Services, Union City, CA (510) 839-0406

Acme Fire Extinguisher Co., Oakland, CA (925) 946-1423

Adanac Fire Protection, Inc., Sunnyvale, CA (408) 735-1550

AFE Fire Protection, Inc., Alameda, CA (510) 5232-6025

AFS Automatic Fire Safety, Novato, CA (800) 521-4448

Arrow Fire Protection, San Francisco, CA (415) 398-1181

Bay Area Fire Protection, San Jose, CA (408) 930-6387

Bay Cities Fire Protection, Santa Rosa, CA (707) 579-8694

Cintas Fire Protection Services, San Jose, CA (650) 318-6065

Dreier Fire Protection, Sebastopol, CA (707) 829-5055

Fire King Fire Protection, Inc., Novato, CA (415) 567-9373

Fire Protection Retrofit, Inc., San Francisco, CA (818) 789-7892

International Fire Equipment, Richmond, CA (510) 237-5000

McCoy Fire Protection, Santa Rosa, CA (707) 673-9492

Pioneer Fire, Inc., Petaluma, CA (707) 762-3473

RLH Fire Protection, San Francisco, CA (415) 442-4829

Sabah International, Inc., Pleasanton, CA (925) 734-5750

SNC Plumbing & Fire Protection, San Francisco, CA (415) 282-0688

Special T Fire Equipment, Inc., Santa Rosa, CA (707) 545-3473

Value Fire Protection, Inc., San Francisco, CA (415) 668-3398

Appendix E

Product specific interview #1 – Guardian III

.....

Who: Belle Pagan

Why: Sales team

When: 12/17/13

Where: Phone (800) 786-2178 ext 218

Intro: The purpose of this interview is to gain product knowledge of the existing engineering solutions used to mitigate residential cooking fires. This information is being compiled by Captain Erich Mesenburg of the Novato Fire Protection District for an applied research project to be submitted to the Executive Fire Officers Program of the National Fire Academy.

Q1: What is your relationship with the company and what is your experience with the product?

A1: Researcher did not ask.

Q2: What is involved in the installation of the product?

A2: We have a countrywide network of licensed installation professionals who can usually install a Guardian III system anywhere from 35 minutes to an hour at most. The system is simple and really only involves one hole to drill in the cabinetry above the range. Now

the range must have a center mounted light and fan configuration so that the spray nozzles and temperature sensors can be magnetically placed to the correct areas. It is critical that you have the right hood configuration because this system is electronic heat sensing, not direct flame dependant like our Guardian I which uses mechanical fusible links. Our distributer in your area is Fire Safety Supply in Santa Rosa, CA, 707-575-9117.

- Q3: Have you partnered with any public safety organizations or housing authority entities on purchasing and/or installing your product?
- A3: We are used in all sorts of military applications here in the US and overseas, assisted living facilities, fire stations, lots of universities, churches...all over. This product is also perfect for the commercial setting in places where no large meals are cooked but food is just warmed up, like in a break room.
- Q4: What codes, laws, ordinances, or rules do you reference when installing your product?
- A4: We are UL300A listed for use as a fire suppression system on a residential stove. Where we have had problems is convincing your California code officials that UL300A refers to the type of stove appliance and not the occupancy. Our product is not just for use in residential buildings.
- Q5: How much does the product cost?
- A5: The MSRP for the Guardian III is \$1,885, less \$45 for a hardwired (direct) connection.

 Options include a manual pull station \$275, alarm interface enclosure assembly \$185,

AC/DC 110 volt adapter \$35, wireless receiver box \$275, remote alarm and strobe combo \$280, and a test cylinder \$355.

Appendix F

Product specific interview #2 – Denlar D1000

.....

Who: Jennifer Decataldo

Why: North American Distribution Manager

When: 1/7/14

Where: Phone -(860) 526-9846 extension 212

Intro: The purpose of this interview is to gain product knowledge of the existing engineering solutions used to mitigate residential cooking fires. This information is being compiled by Captain Erich Mesenburg of the Novato Fire Protection District for an applied research project to be submitted to the Executive Fire Officers Program of the National Fire Academy.

Q1: What is your relationship with the company and what is your experience with the product?

A1: I am the North American Distribution Manager.

Q2: What is involved in the installation of the product?

A2: It is fairly simple because the unit comes fully integrated. The Denlar D1000 is as close to "plug and play" as you can get. You might need an electrician to help with some of the wiring, but usually any HVAC technician or fire protection system installer can handle it without a problem.

- Q3: Have you partnered with any public safety organizations or housing authority entities on purchasing and/or installing your product?
- A3: Yes...if you are familiar with our website, you will find an example in the Bridgeport Housing Authority in Connecticut. We work with a lot of HUD.
- Q4: What codes, laws, ordinances, or rules do you reference when installing your product?
- A4: We are UL300A and I-Code compliant for use over a residential grade appliance. There is often confusion about the term "residential" because we are referring to the appliance and not necessarily the occupancy type. We often give the example of using our product in the "not for profit" setting like in a church. We also offer a NFPA101 option for use in the healthcare setting.
- Q5: How much does the product cost?
- A5: The MSRP for the D1000 series ranges between \$5,000 and \$6,000. The DS model ranges between \$1,500 and \$2,000. It is also important to note that you do not need to maintain these units like in a commercial setting every 6 months. Our system just requires a minimal yearly maintenance.

We have not partnered with any insurance agencies for lower building owner rates yet, but it is in the works.

Appendix G

Product specific interview #3 – StoveTop FireStop

.....

Who: Ray Harris

Why: Sales

When: 12/17/13

Where: Phone (888) 616-7976

Intro: The purpose of this interview is to gain product knowledge of the existing engineering solutions used to mitigate residential cooking fires. This information is being compiled by Captain Erich Mesenburg of the Novato Fire Protection District for an applied research project to be submitted to the Executive Fire Officers Program of the National Fire Academy.

Q1: What is your relationship with the company and what is your experience with the product?

A1: Account manager for 10 years

Q2: What is involved in the installation of the product?

A2: The installation is very simple. For use on your typical vent hood, you just use the industrial strength magnants to center each can between two burners. The fuse on the bottom of the can is flame activated and pops when there is a fire. The dry chemical is then gravity fed onto the flame for full extinguishment. Now, if you have a microwave

above the range, then we have the Microhood system which anchors to the wall and extends over the range. To account for the lower clearance, the Microhood actually has two smaller can per unit, so there will end up being one can over each burner, four in total

- Q3: Have you partnered with any public safety organizations or housing authority entities on purchasing and/or installing your product?
- A3: Oh yes...have you been to the website? We have been partnering with the military for 40 years. We sell a lot of units to apartment buildings and HUD areas all over the country.

 We are very popular with housing authorities.
- Q4: What codes, laws, ordinances, or rules do you reference when installing your product?
- A4: None really, although some jurisdictions have actually added our product to their local ordinance as being required in certain occupancies, like Shreveport, Louisiana. There is a list of some other examples on our website.
- Q5: How much does the product cost?
- A5: The regular cans are about \$50/pair and the microwave unit is about \$70/pair. Yes, that is pretty cheap since we had an insurance company tell us that they have never had a cooking fire claim over \$1500 after our product had been used. Go to our website and look at all of the testimonials...the product really works.

Appendix H

Product specific interview #4 – HomeSenser

.....

Who: Debbie Eisinger

Why: Chief Executive Officer – HomeSense Enterprises, LLC

When: 11/19/13

Where: Phone -(877) 785-9901

Intro: The purpose of this interview is to gain product knowledge of the existing engineering solutions used to mitigate residential cooking fires. This information is being compiled by Captain Erich Mesenburg of the Novato Fire Protection District for an applied research project to be submitted to the Executive Fire Officers Program of the National Fire Academy.

Q1: What is your relationship with the company and what is your experience with the product?

A1: I run the company. My husband, Lee, invented the HomeSenser in 2002 while we were caring for his aging mother who had Alzheimer's Disease. Lee wanted to protect his mothers independence and allow her to cook safely in her own home. Lee figured that he couldn't turn off her disease, but he could turn off her appliances. At the time, he never imagined he would be creating a new method of fire prevention for others.

Q2: What is involved in the installation of the product?

- A2: We wanted the device to become an integral part of the stove, not just plugged into an outlet. We don't want this device to be easily disconnected, so it has to be hardwired into the back of the range.
- Q3: Have you partnered with any public safety organizations or housing authority entities on purchasing and/or installing your product?
- A3: Absolutely...we are a woman owned business that manufactures right here in Ohio and we are very involved with Area Agency of Aging, the local public housing authorities, and Partners for Safety. We have worked with mental health organizations, the visual and audible impaired, local fire departments, college dorms, and religious organizations.
- Q4: What codes, laws, ordinances, or rules do you reference when installing your product?
- A4: None
- Q5: How much does the product cost?
- A5: The HomeSenser is \$330. We have helped customers apply for all kinds of grants...FEMA, private foundations, religious organizations, HUD.

Appendix I

Product specific interview #5 – Stove Guard Guardian 2010

Who: Charlotte Uhrich

Why: Stove Guard manager

When: 12/17/13

Where: Phone (888) 607-8683

Intro: The purpose of this interview is to gain product knowledge of the existing engineering solutions used to mitigate residential cooking fires. This information is being compiled by Captain Erich Mesenburg of the Novato Fire Protection District for an applied research project to be submitted to the Executive Fire Officers Program of the National Fire Academy.

Q1: What is your relationship with the company and what is your experience with the product?

A1: I am a manager for the company and the daughter of the inventor, Don.

Q2: What is involved in the installation of the product?

A2: As long as the stove has a grounded four prong plug, then it is a simple as pluging it in.

Q3: Have you partnered with any public safety organizations or housing authority entities on purchasing and/or installing your product?

A3: We mostly sell individual units based on recommendations by people who believe in our product like occupational therapists, home care professionals, and people who are helping someone with special needs. We did sell 150 units a while ago to outfit a whole senior living community...Menorah Park Center in Beachwood, Ohio. We are a little more popular in Canada than in the US, but probably only 60/40. We are in negotiations right now with a US restaurant chain to outfit 3000 kitchens with our product, so we are very excited.

Q4: What codes, laws, ordinances, or rules do you reference when installing your product?

A4: None.

Q5: How much does the product cost?

A5: The regular model is \$400 and the gas version is \$500 because it has the extra gas shut off valve.

Appendix J

Product specific interview #6 – CookStop

.....

Who: Mike Chase

Why: VP of Sales and Marketing

When: 1/6/14

Where: Phone -(408) 929-8808

Intro: The purpose of this interview is to gain product knowledge of the existing engineering solutions used to mitigate residential cooking fires. This information is being compiled by Captain Erich Mesenburg of the Novato Fire Protection District for an applied research project to be submitted to the Executive Fire Officers Program of the National Fire Academy.

Q1: What is your relationship with the company and what is your experience with the product?

A1: I am one of the founders of the company and now handle a lot of the sales and marketing.

Q2: What is involved in the installation of the product?

A2: It depends on the power supply of the stove. As you saw on the website, we have different models available, but the most common is the 220 volt with either a 3 or 4 prong plug. With those units, the installation is as simple as scooting the stove out, pluging our power controller in, and scooting the stove back in. We designed that part of the system to fit inside of the existing indentation of the stove so that the stove still fits flush against

the wall, basically all the wiring fits in a double j-box. The part of the system that is in plain sight is the oblong controller with the buttons on it which connects to the power controller with a type of Ethernet looking cable. The controller is usually mounted to the underside of an upper kitchen cabinet near the stove, but not over a burner. The controller is constantly looking for motion and it starts an internal countdown when no motion is detected. If no motion is found in the range of vision of the sensor in five minutes, then power is shut off to the stove. We program the unit for five minutes in the factory, but there are a lot of different ways to configure the system and all of the settings can be changed.

- Q3: Have you partnered with any public safety organizations or housing authority entities on purchasing and/or installing your product?
- A3: We have worked with the Orange County Fire Authority, but mostly we are popular with three groups...the senior retirement communities in HUD multifamily residences, in schools like the Chicago University Center where they have a large group of students living together, and then the internet, which are individual sales to a wide range of people providing cooking fire prevention for a myriad of different reasons. Initially, we thought our primary group of customers would be seniors, but we have found that this technology helps all kinds of folks in a bunch of different settings.
- Q4: What codes, laws, ordinances, or rules do you reference when installing your product?
- A4: We knew that we would need UL approval, so we went through that process and became approved by UL and CSA. We have had no issues with codes or ordinances.
- Q5: How much does the product cost?

A5: We sell direct from our website and we have a few local retailers, like in San Diego and LA, for example. The CookStop sells from \$359 to \$395, depending on the model you need.

Some local insurance companies will lower rates by 5% or so for properties with the CookStop installed, but we have not had any luck with the bigger companies.

Appendix K

Product specific interview #7 – Safe-T-element

.....

Who: Earl Diment

Why: Chief Safety Officer – Pioneering Technologies Inc.

When: 11/19/13

Where: Phone -503-819-2417

Intro: The purpose of this interview is to gain product knowledge of the existing engineering solutions used to mitigate residential cooking fires. This information is being compiled by Captain Erich Mesenburg of the Novato Fire Protection District for an applied research project to be submitted to the Executive Fire Officers Program of the National Fire Academy.

Q1: What is your relationship with the company and what is your experience with the product?

A1: I am the Chief Safety Officer at Pioneering Tech, the company that makes Safe-T-element. I was in the fire service for 24 years in Portland, Oregon.

Q2: What is involved in the installation of the product?

A2: Our qualified installation technicians take care of the retrofit or you can even get them pre-installed right from the factory on new stoves.

- Q3: Have you partnered with any public safety organizations or housing authority entities on purchasing and/or installing your product?
- A3: We have installed 110,000 units worldwide and have worked closely with many organizations and military institutions. We do a lot of work with housing authorities and there are a lot of grant opportunities. We just helped the Denver Housing Authority replace all of their burners, not only for fire prevention, but we estimate that the Safe-T-element will reduce their use of energy by 50%. Leveraging the energy savings against the cost of product is a great way to help win approval from decision makers.
- Q4: What codes, laws, ordinances, or rules do you reference when installing your product?
- A4: We have been written into quite a few codes, too many to mention...some recent examples would be the Toronto Housing Authority in Canada, Buffalo Housing Authority, Providence Housing Authority, City of Wilson in North Carolina, Greely, Colorado, Denver, Colorado, I could go on and on.
- Q5: How much does the product cost?
- A5: Each unit costs about \$175.

Appendix L

Residential Cooking Fire Mitigation

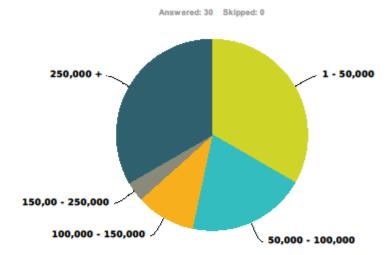
Q1 With which organization are you affiliated?

Answered: 30 Skipped: 0

#	Responses	Date
1	Maine State Fire Marshal's Office	11/22/2013 6:36 AM
2	Tiburon Fire Protection District	11/18/2013 8:22 PM
3	Fairfax County Fire Rescue	11/17/2013 4:47 AM
4	Marin County Fire Department	11/15/2013 9:35 AM
5	South King Fire & Rescue (Washington State)	11/15/2013 7:48 AM
6	Fairfax County Fire & Rescue, Fairfax, VA	11/14/2013 1:49 PM
7	Contra Costa Co. Fire	11/14/2013 1:48 PM
8	West Allis Fire Department	11/14/2013 12:27 PM
9	Howard County Fire & Rescue, MD	11/14/2013 12:10 PM
10	Cedar Rapids Fire Department	11/14/2013 11:33 AM
11	Clark County Fire District 6	11/14/2013 11:22 AM
12	Novato Fire District	11/14/2013 10:41 AM
13	CCCFPD	11/14/2013 7:46 AM
14	Prince George's County Maryland Fire/EMS Department	11/14/2013 6:52 AM
15	Moorhead Fire Department	11/14/2013 6:24 AM
16	Fayetteville Fire / Emergency Management	11/14/2013 5:38 AM
17	St. george fire protection district	11/14/2013 5:31 AM
18	Chesterfield Virginia Fire and EMS	11/14/2013 4:46 AM
19	Larkspur Fire Department	11/13/2013 11:26 PM
20	Cosumnes Fire Department	11/13/2013 5:31 PM
21	San Ramon Valley Fire Protection District	11/13/2013 5:13 PM
22	Anacortes Fire Department	11/13/2013 4:35 PM
23	City of Napa Fire	11/13/2013 4:29 PM
24	Petaluma Fire Dept.	11/13/2013 4:28 PM
25	Fresno City Fire Department	11/13/2013 4:18 PM
26	Kentfield Fire Protection District	11/13/2013 4:16 PM
27	Virginia Beach Fire Department	11/13/2013 4:12 PM
28	City of Mill Valley FD	11/13/2013 4:10 PM
29	Newton Fire/EMS	11/13/2013 3:59 PM
30	Novato Fire District	11/13/2013 3:54 PM

Residential Cooking Fire Mitigation

Q2 What size population do you serve?

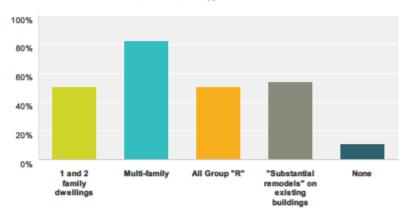


Answer Choices	Responses	
1 - 50,000	33.33%	10
50,000 - 100,000	20%	6
100,000 - 150,000	10%	3
150,00 - 250,000	3.33%	1
250,000 +	33.33%	10
Total		30

Residential Cooking Fire Mitigation

Q3 Does your organization require residential fire sprinkler systems in the following (check all applicable):

Answered: 28 Skipped: 2



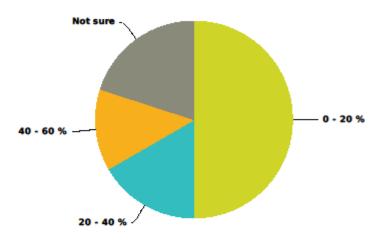
Answer Choices	Responses	
1 and 2 family dwellings	50%	14
Multi-family	82.14%	23
All Group "R"	50%	14
"Substantial remodels" on existing buildings	53.57%	15
None	10.71%	3
Total Respondents: 28		

Q3 Comments:

- 1. IRC buildings without water supply or access problems are unsprinklered. All other R occupancies are sprinklered.
- 2. Multifamily, skilled care, shelters, and highrises built after 1976
- 3. Only homes over 7000 square feet

Q4 What % of your residential structure fire responses are caused by cooking?





Answer Choices	Responses	
0 - 20 %	50%	15
20 - 40 %	16.67%	5
40 - 60 %	13.33%	4
60 - 80 %	0%	0
80 - 100 %	0%	0
Not sure	20%	6
Total		30

Q4 Comments:

- 1. I suspect it is in the 20-40% RANGE, BUT OUR RECORDS ARE NOT GREAT
- 2. 23% off all structure fires are cooking related 83% of structure fires are residential

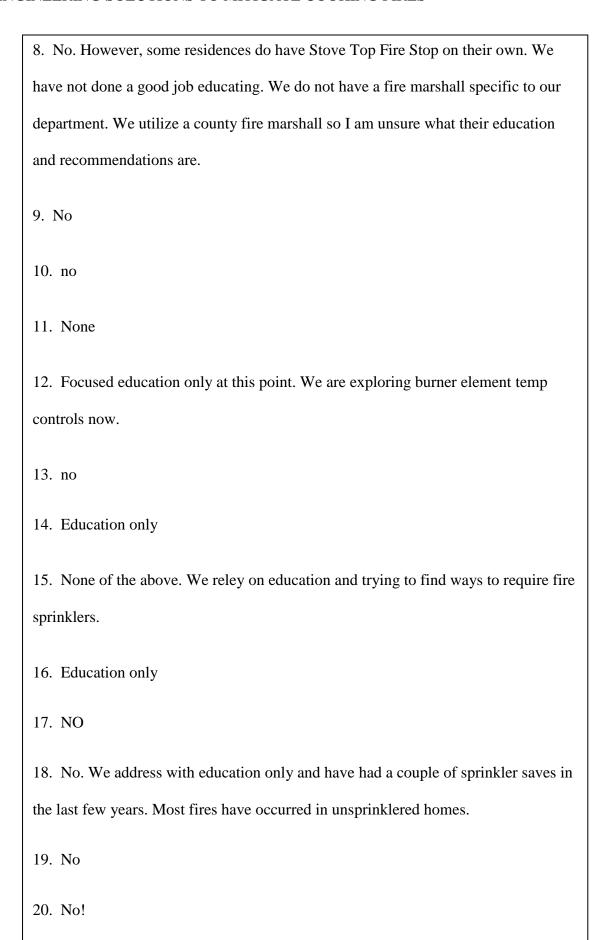
Q5 Has your organization explored using any of the following engineering solutions to help mitigate cooking fires in existing non-sprinkled buildings?

Answered: 4 Skipped: 26

Fire suppression											
	Guardian	Stovetop Firestop			Denlar D	1000		Oth	er	Total	
Any of these	25	6 1	5	0% 2			01	% 0	25% 1		4
Motion detectors											
	Innohome St	ove Guard		HSI	E Uniwire			Other		Total	
Any of these			0% 0				0% 0		100% 1		1
Contact burner temp and co	ontrol										
		Safe-T-Element				Othe	r		Total		
Any of these					50% 1			50% 1			2
Over-range temp and contr	ol										
	Inno	home Stove Alarm					Other		To	tal	
Any of these						0% 0		100	% 1		1
Smoke detection and contro	ol										
	Fidep	ro Intelligent Alarm					Other		To	tal	
Any of these						0% 0		100	% 1		1

Q5 Comments:

- 1. No, education only
- 2. None
- 3. No
- 4. education only
- 5. No
- 6. Looked but have only recommended in new or remodel projects
- 7. No, education.



- 21. No, we provide information on Sprinklers, smoke detectors and home use extinguishers but share no brand names or specifics
- 22. Education only -
- 23. No
- 24. None, education only at this time.

Q6 If yes to #5, then:

Answered: 7 Skipped: 23

	Yes	No	Total Respondents
Did your organization receive a grant?	0%	100%	
	0	7	7
Did you have community partners to help purchase or install the devices?	0%	100%	
	0	7	7
Have the devices met your expectations/goals?	0%	100%	
	0	6	6

Q6 Comments:

1. NA

- 2. The guardian system is new, so we don't have much of a frame of reference yet as to effectiveness. We also did some testing of some of the "Tuna Can Extinguisher" devices.
- 3. No one has installed them.
- 4. It was part of a suggested guideline for some of our senior living facilities.
- 5. NA

Q7 If yes to #5, what did the engineering solution cost?

Answered: 5 Skipped: 25

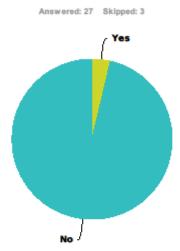
	Responses	Date
1	NA .	11/17/2013 4:47 AM
2	Cost bome by the end user	11/14/2013 1:48 PM
3	We are leaving the purchasing up the residents.	11/14/2013 6:24 AM
4	NA .	11/13/2013 5:31 PM
5	NA	11/13/2013 4:35 PM

Q8 If yes to #5, what federal, state, or local codes/ordinances applied to the installation of the engineering solution to which you have experience?

Answered: 5 Skipped: 25

	Responses	Date
1	NA .	11/17/2013 4:47 AM
2	We used the CFC and UL 300E compliance	11/14/2013 1:48 PM
3	None	11/14/2013 6:24 AM
4	NA .	11/13/2013 5:31 PM
5	NQ	11/13/2013 4:35 PM

Q9 Has your organization changed or added a local code/ordinance to require use of a residential cooking fire mitigation engineering solution in certain occupancy types?



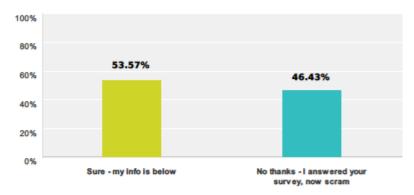
Answer Choices	Responses	
Yes	3.70%	1
No	96.30%	26
Total		27

Q9 Comments:

- 1. it came in as a special request to install about 300 of these in a senior apartment complex that has a problem with kitchen fires. The building is sprinklered, but they didn't want the water damage.
- 2. Only in businesses

Q10 Would you be willing to have a brief telephone interview with me about your experience related to residential cooking fire mitigation?

Answered: 28 Skipped: 2



Answer Choices	Responses	
Sure - my info is below	53.57%	15
No thanks - I answered your survey, now scram	46.43%	13
Total		28

Q10 Comments:

- 1. Jessica Power 435-7207
- 2. But no info to pass on...
- 3. Scott Alber-415-473-6566
- 4. Gordy 253.946.7241
- 5. Robert Marshall, Contra Costa County Fire, 925-941-3523 rmars@cccfpd.org
- 6. BC Gordon Wallace 410-313-5922

- 7. Kristan Maurer Clark County Fire Ditrict 6 8800 NE Hazel Dell Avenue Vancouver WA 98665 360-576-1195 Also Tualatin Valley Fire and Rescue would be a great resource for this information. They are very progressive with education and community out reach in our area.
- 8. Chad Stangeland Assistant Fire Marshal Moorhead Fire Department (218) 299-5433
- Robby Dawson Chesterfield Fire and EMS 804-717-6838 dawsonj@chesterfield.gov
- We have not explored cooking fire mitigation. Amber Anderson Cosumnes Fire
 916-405-7105
- 11. Anytime Erich... Ian Hardage, Fire Plans Examiner San Ramon Valley Fire Protection District 1500 Bollinger Canyon Road San Ramon, CA 94583 Office:925-838-6654 Cell:707-738-8223 (personal) ihardage@srvfire.ca.gov
- 12. Paula Dueweke, Fire Inspector (707) 778-4574
- 13. Justin Beal, Supervising Fire Inspector 559-621-4143 justin.beal@fresno.gov
- 14. Not sure I can add any value, but would happy to assist you.
- Ha ha...call me anytime I'll hook you up with our Fire Marshall, Amy Valdez
 (VBFD) 757-377-0134
- 16. Tom Welch Battalion Chief Mill Valley Fire Dept. 415-320-3852

Appendix M

Fire Loss Management Questionnaire

.....

Who: NFPD Deputy Fire Marshal Lori Jessell

Why: Excellent knowledge of fire prevention and applicable codes and ordinances

When: 12/22/13

Where: Via e-mail with follow up telephone clarification

Intro: The purpose of this questionnaire is to gain insight from a subject matter expert regarding the laws, codes, and ordinances that might apply to engineering solutions used to mitigate residential cooking fires. This information is being compiled by Captain Erich Mesenburg of the Novato Fire Protection District for an applied research project to be submitted to the Executive Fire Officers Program of the National Fire Academy.

Question: If one of these systems was put in place in addition to currently required safety measures, is there a law, code, or ordinance requirement that applies?

1. Home cooking fire suppression systems (e.g., Guardian III, Denlar D1000, StoveTop FireStop)

Jessell: Currently there is not an adopted code at the state level requiring the installation of these types of systems. Local building or Fire Authorities may adopt local ordinances requiring the installation of these systems. If one of these systems is to be installed it would be required to be installed and maintained with

the standard (UL300, UL300A, UL1254, NFPA 17, NFPA 17A or NFPA 96) and manufacture requirements for that system in accordance with CFC 901.4 and a permit may be required by the fire code official in accordance with CFC 901.2. Our requirements are based on if the product meets the definition of a fire protection system. For instance, if the Guardian III meets the definition for a fire sprinkler system, then it must be permitted, installed, and maintained to the same code as any other fire sprinkler system in the District...even if the product is installed voluntarily and regardless of if the residence is a State Fire Marshall regulated occupancy. For the definition, we usually start with the International Fire Code, then the California Fire Code, then Title 19 of the Health & Safety Code, then the NFPA standard (probably #13 for this one), and then, of course, any portions of our own NFPD ordinance. If all else fails, there is a very specific version of the Webster's Dictionary that we may refer to. The CFC and Title 19 are occasionally a bit different, so the mantra is...the more restrictive wins every time.

The Denlar D1000 would probably have to meet NFPA 96 for commercial hood and duct systems, but we have not run into that system in the residential setting, yet. Regardless, the system would need to meet UL or another Nationally Recognized Testing Laboratory standard, it would have to be maintained annually, and the responsible would need to notify NFPD of the maintenance...similar to the Yellow Card system we have for R1/R2's. The installation of such a system probably would need a plan, a permit, and an inspection.

Same goes for the StoveTop FireStop. Yes, it is voluntary and most likely a great protection, but it has to be maintained and tested in accordance with regulation. We cannot allow people to feel protected when a system might be expired, non-operational, or malfunctioning, especially when talking about rental property that might turn over frequently. There might be an opportunity for something like the StoveTop FireStop where we keep an expiration database and just require a Yellow Card every five years...we are starting to see that with the new smoke detectors.

2. Motion detectors to prevent unattended cooking (e.g., HomeSenser, StoveGuard, Cookstop)

Jessell: Currently there is not an adopted code at the state level requiring the installation of these types of systems or devices. Local Building or Fire Authorities may adopt local ordinances requiring the installation of these systems or devices. If one of these systems were to be installed they would be required to be installed and maintained in accordance California Plumbing or Electrical Codes as well as the manufacture requirements. I don't know much about these manufacturers...I have never seen their products. We run into new types of products at fire prevention vendor fairs at the conferences we go to and there seems to be some neat products coming soon.

3. Contact burner temperature sensor and control (e.g., Safe-T-element)

Jessell: I have seen the Safe-T-element and I know that the installation of this product needs to be in accordance with the stove manufacturer recommendation

and with the building department. Currently there is not an adopted code at the state level requiring the installation of the Safe-T-element. Local Building or Fire Authorities may adopt local ordinances requiring the installation of these systems in the future. If Safe-T-elements were to be installed, they would be required to be installed and maintained in accordance California Plumbing or Electrical Codes as well as the manufacture requirements. This type of product dealing with appliances and heat production is a building code issue. If a builder makes the Safe-T-element installation just part of the build, then the building department can check the plans and approve it much easier than a retrofit. This product would not involve NFPD.