

**October the 19th, 2010, presentation of Jerald E. Farley to the State of Hawaii
Legislative Task Force On Illegal Fireworks on behalf of the consumer fireworks
industry.**

I. Background

A. State Law Definitions

First of all, it is important to know what fireworks are. The following are definitions taken from the State Fireworks Control Law 132D [L 1994, c 180, pt of §1; am L 2000, c 233, §§4, 16; am L 2006, c 183, §§2, 3, 20; am L 2008, c 38, §1].

"Aerial device" means any fireworks containing one hundred thirty milligrams or less of explosive materials that produces an audible or visible effect and is designed to rise into the air and explode or detonate in the air or to fly about above the ground, and that is prohibited for use by any person who does not have a permit for display issued by a county under section 132D-16. "Aerial devices" classified as fireworks under UN0336 and UN0337 by the United States Department of Transportation as set forth in Title 49 Code of Federal Regulations include firework items commonly known as bottle rockets, sky rockets, missile-type rockets, helicopters, torpedoes, daygo bombs, roman candles, flying pigs, and jumping jacks that move about the ground farther than a circle with a radius of twelve feet as measured from the point where the item was placed and ignited, aerial shells, and mines.

"Articles pyrotechnic" means pyrotechnic devices for professional use similar to consumer fireworks in chemical composition and construction but not intended for consumer use that meet the weight limits for consumer fireworks but are not labeled as such, and that are classified as UN0431 or UN0432 by the United States Department of Transportation.

"Consumer fireworks" means any fireworks designed primarily for retail sale to the public during authorized dates and times, that produces visible or audible effects by combustion, and that is designed to remain on or near the ground and, while stationary or spinning rapidly on or near the ground, emits smoke, a shower of colored sparks, whistling effects, flitter sparks, or balls of colored sparks, and includes combination items that contain one or more of these effects. "Consumer fireworks" shall comply with the construction, chemical composition, and labeling regulations of the United States Consumer Product Safety Commission as set forth in Title 16 Code of Federal Regulations and fireworks classified as UN0336 and UN0337 by the United States Department of Transportation as set forth in Title 49 Code of Federal Regulations. "Consumer fireworks" include firework items commonly known as firecrackers that are single paper cylinders not exceeding one and one-half inches in length excluding the fuse and one-quarter of an inch in diameter and contain a charge of not more than fifty milligrams of pyrotechnic composition, snakes, sparklers, fountains, and cylindrical or cone fountains that emit effects up to a height not greater than twelve feet above the ground, illuminating torches, bamboo cannons, whistles, toy smoke devices, wheels,

and ground spinners that when ignited remain within a circle with a radius of twelve feet as measured from the point where the item was placed and ignited, novelty or trick items, combination items, and other fireworks of like construction that are designed to produce the same or similar effects.

"Display fireworks" means any fireworks designed primarily for exhibition display by producing visible or audible effects and classified as display fireworks or contained in the regulations of the United States Department of Transportation and designated as UN0333, UN0334, or UN0335, and includes salutes containing more than two grains (one hundred and thirty milligrams) of explosive materials, aerial shells containing more than forty grams of pyrotechnic compositions, and other display pieces which exceed the limits of explosive materials for classification as "consumer fireworks". This term also includes fused setpieces containing components, which together exceed fifty milligrams of salute power. The use of display fireworks shall be prohibited for use by any person who does not have a display permit issued by a county.

"Fireworks" means any combustible or explosive composition, or any substance or combination of substances, or article prepared for the purpose of producing a visible or audible effect by combustion, explosion, deflagration, or detonation and that meets the definition of aerial device or consumer or display fireworks as defined by this section and contained in the regulations of the United States Department of Transportation as set forth in Title 49 Code of Federal Regulations. The term "fireworks" shall not include any explosives or pyrotechnics regulated under chapter 396 or automotive safety flares, nor shall the term be construed to include toy pistols, toy cannons, toy guns, party poppers, pop-its, or other devices which contain twenty-five hundredths of a grain or less of explosive substance.

"Pyrotechnic composition" or "pyrotechnic contents" means the combustible or explosive component of fireworks.

B. Focus

Fireworks are either display fireworks, articles pyrotechnic or consumer fireworks. Consumer fireworks are either non-aerial consumer fireworks or aerial consumer fireworks. Only non-aerial consumer fireworks and novelty or trick items and combination items of non-aerial consumer fireworks are legal for purchase by, possession by and use by members of the general public unless that member of the general public has obtained an appropriate license or permit at needed. In addition, a permit is required to purchase, possess and use firecrackers and each permit allows the purchase of no more than 5,000 firecrackers. Separate permits are required to purchase additional quantities of fireworks.

Therefore, illegal fireworks are those for which the person does not have the appropriate, required license or permit if one is required.

Illegal use of fireworks is use of illegal fireworks at any time or use of otherwise legal fireworks at a time or place not allowed by law unless the person has the appropriate, required license or permit if one is required.

C. Key Words

The definition of “fireworks” contains the phrase “combustible or explosive composition, or any substance or combination of substances, or article prepared for the purpose of producing a visible or audible effect by combustion, explosion, deflagration, or detonation”. The three key words are: “combustion”, “deflagration” and “detonation”.

“Combustion” means the sequence of exothermic chemical reactions between a fuel and an oxidant (oxygen donor) accompanied by the production of heat and the conversion of chemical species. The release of heat can result in the production of light in the form of either glowing or a flame.

Complete combustion is rare. It requires adequate oxygen to consume all of the fuel. Typically fireworks are carefully designed and produced. Complete combustion is usually complete combustion reactions.

Incomplete combustion is more typical of all other reactions. There is an inadequate supply of oxygen and, hence, not all of the fuel is consumed.

Note that the definition uses the phrase “sequence of exothermic chemical reactions”. This means that more than one, usually many and very often a large number of individual exothermic chemical reactions occur one or more after the preceding reaction or reactions. Think “spreading fire”.

The approximate speed of combustion reactions is in millimeters per second. Remember that 10 millimeters equals 1 centimeter and 1000 millimeters and 100 centimeters equals 1 meter. 25.4 millimeters and 2.54 centimeters equal 1 inch. 360 millimeters or 39.6 centimeters equals one yard. The point is that combustion reactions, relatively speaking progress much more slowly than deflagration or detonation reactions.

Examples of combustion reactions are, of course, typical fires and consumer fireworks. Consumer fireworks are for the most part combustion reactions.

“Deflagration” means the subsonic combustion—that is exothermic chemical reactions—that usually propagates through thermal conductivity, that is, hot burning materials heat the next layer of cold materials and ignites them.

Most “fire” found in daily life from flames to explosives is technically deflagration. What distinguishes typical combustion—like consumer fireworks which have very limited quantities of fuel and oxidants—from other combustion events is the available quantity of fuel, access to oxygen and, in many cases, the chemical reactivity of the fuels.

If misused, a consumer fireworks item can in some instances convey enough thermal energy to ignite another item or substance. But other combustibles, if there are a sufficiently large enough source of fuel and oxygen can not only ignite other items and substances but also propel the combustion reaction very energetically forward, outward from the initial reaction location. Damage to buildings, equipment and injury to people can result even from a large-scale, short duration deflagration. At flame speeds near the speed of sound (760 miles per hour at sea level), pressure can produce results usually similar to detonations.

The approximate speed of deflagration reactions is in meters per second as compared to millimeters per second for typical mere combustion reactions. Remember 1000 millimeters per meter. Hence, the reactive speed of a deflagration can be many hundreds of times faster than a typical combustion reaction. Compare a burning piece of paper with a typical fire in a fire place with a well-involved fire in a structure to a fire at a facility that contains highly flammable materials such as paint, pallets, potato chips.

Examples of deflagration reactions are rocket propellants, confined black powder reactions, display fireworks and other 1.3G substances.

“Detonation: means the supersonic exothermic chemical reactions that accelerates through a medium and that eventually drives a shock wave propagating directly in front of it.

Detonations are very destructive and loss of life can occur if the detonation is too close to persons. In terms of external damage, it is important to distinguish between detonations and deflagrations where the exothermic wave is subsonic and the maximum pressures are at most a quarter of those generated by detonations.

Dynamite, TNT and military explosives produce detonations.

The approximate speed of detonation reactions is in kilometers per second. There are 1000 meters in a kilometer. There are 1.6 kilometers per mile.

Solid and liquid explosives have a much higher velocity of detonation than do gaseous explosives.

D. Key ideas to keep in mind

The reactions that produce combustion, deflagration and detonations are chemical reactions. They involve electron transfers. They are not molecular, that is nuclear. They are oxygen depleting reactions.

Pyrotechnic mixtures react more slowly than other deflagrations and are intended to and designed to produce lights, colors, smoke, heat, noise and motion. Other deflagrations may have been intended to produce and have been designed to produce other results.

Therefore, it is not only what chemicals are used but also, and more importantly, how they are prepared, packaged and the conditions under which they are used.

As an example, consider how black powder reactions in different conditions. It is important to note that, despite incorrect statements by some in positions of authority, black powder is not found in consumer fireworks. Black powder is 75% (by weight) potassium nitrate, 15% charcoal and 10% sulfur. It must be properly mixed, moistened and ground to a high degree of homogeneity and uniformity of particle size. In a pile and when ignited by a flame, black powder produces an orange flash. When spread out in a trail it burns down the line of the trail and can act as a fuse. If it is placed in an open-ended container, it will produce a column of hot gases out the open end of the container. But, if it is placed in a closed container and ignited by a fuse, it produces those same hot gases which rapidly build up inside the closed container and may eventually and violently rupture the container and cause substantial damage to nearby items, substances or materials.

Pyrotechnics are comprised of carefully chosen chemicals that have been found to produce the desired effects: light, color, sound, smoke, motion. The quantities of each chemical are carefully and expertly determined so that the maximum desired effect is achieved. Every pyrotechnic item must have an oxidizing agent (the oxygen donor) as well as a fuel (the electron donor). Typically also, the pyrotechnic item will have a binder that holds the components together and, thereby, facilitates the uniform and most efficient reaction. Some pyrotechnics contain retardants that are used to slow down the speed of the chemical reaction. Accelerants are not used because they are not necessary. The approved list of chemicals that may be used in consumer fireworks is found in APA Standard 87-1 at Table 4-3-1.

It is important to note that pyrotechnics contain in themselves all the oxygen that they need. Therefore, smothering them will not put them out as smothering will put out other combustion reactions. In fact, smothering a pyrotechnic combustion reaction may lead to a build up of pressure and a violent reaction that may cause more damage or injury.

The best way to fight a fireworks fire is with water.

E. A Little History

Pyrotechnics have been around for some time. There is archeological evidence that pre-historical man, who “tamed” fire understood that throwing what was sulfur on a fire could produce flashes of light. “Greek fire” was a combination of sulfur and saltpeter. It was used in war in the 7th century A.D. and probably for several hundreds of years before that time. The imperfect and much less effective precursor of black powder probably was in use in limited capacities for ceremonial, war and other purposes before 1000 A.D. Marcus Graecus wrote the “Book of Fires for Burning the Enemy” in the 8th century A.D. Chinese discovery of pyrotechnics and their use of it for warfare and religious and ceremonial purposes date from as early as the 9th century A.D. There are some who claim

that rulers of the Indian sub-continent discovered black powder and pyrotechnics at about this same time. Chinese use of pyrotechnics date from at least 1100, the 12th century A.D. Leonardo DaVinci, Michaelangelo and many other Italian artists and artisans are known to have “manufactured” pyrotechnic “machines” for use on the occasions of wedding, victories in battles, even for use in battles. European settlers used pyrotechnics to induce awe and fear in natives of the American continents more than 100 years before the 1776 revolution. Chinese brought their fireworks traditions to the United States in the early 1800’s.

And, there is that famous excerpt from a letter by John Adams, to his wife Abigail. Of course, he thought that the Second of July would be the day forever after remembered. Unfortunately, it took 2 more days for all the delegates to sign the Declaration of Independence: “The Second Day of July, 1776, will be the most memorable Epocha in the history of America. I am apt to believe that it will be celebrated, by succeeding Generations, as the great anniversary Festival. It ought to be commemorated, as the Day of Deliverance by solemn Acts of Devotion to God Almighty. It ought to be solemnized with Pomp and Parade, with Shews, Games, Sports, Guns, Bells, Bonfires and Illuminations (here, he means fireworks) from one End of this Continent to the other from this Time forward forever more.”

It is clear to me that for an elected body to ban the use by citizens of the United States, any of the states or local cities, counties, boroughs or parishes of fireworks on the Fourth of July is fundamentally, unequivocally and clearly un-American.

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combustible or explosive composition, or any substance or combination of substances, or article prepared for the purpose of producing a visible or audible effect by combustion, explosion, deflagration, or detonation

F. Who and What agencies regulate fireworks

The manufacturing of consumer fireworks and all matters relating to display fireworks are regulated by the Bureau of Alcohol, Tobacco, Firearms and Explosives (BATFE) and THE United States Occupational Safety and Health Administration (USOSHA).

Storage of consumer fireworks, articles pyrotechnic and display fireworks are regulated by BATFE and USOSHA.

Transportation of articles pyrotechnic, display fireworks and fireworks items that may be classified as consumer fireworks are regulated by the United States Department of Transportation (USDOT).

The United State Coast Guard, Customs and Federal Aviation Administration also regulate the flow of fireworks in international commerce.

Also, the USCPSC has additional regulations that affect consumer fireworks.

Most states use and I assume the state of Hawaii uses NFPA 1123 and NFAP 1124 and NFPA 1126 to regulate all manufacture and use of articles pyrotechnic, all display fireworks and all use of any fireworks items before a proximate audience.

In Hawaii, the fire departments regulate the storage of all fireworks. Presumably, all storage facilities meet applicable building, fire and zoning codes. Licenses and permits are issued by or under the authority of the fire departments. Enforcement is by the police departments.

G. Consumer fireworks requirements

Specifically, what qualifies as a consumer fireworks item is specified in 49 CFR as published in APA Standard 87-1 (USDOT) and as further limited by the regulations in 16 CFR (USCPSC).

Consumer fireworks are allowed by USDOT to have only limited amounts of specifically allowed chemical. If the chemicals in the item are not allowed or if the allowed chemicals exceed the quantities allowed, the items cannot be classified as nor transported as consumer fireworks. By default they are either display fireworks or illegal improvised devices or illegal explosive devices.

They must meet the requirements for Division 1.4G explosives. Explosives are classified as 1.1 through 1.6 explosives. But, remember that 1.4G consumer fireworks for the most part do not explode. They combust. They are classified as explosives because they contain some but not all of the chemicals found in explosives and only in very limited quantities. The International Fire Code in Chapter 33 describes each of the divisions as follows:

Division 1.1 Explosives are explosives that have a mass explosion hazard. A mass explosion is one which affects the entire load instantaneously.

Division 1.2 Explosives are explosives that have a projection hazard but not a mass explosion hazard.

Division 1.3 Explosives are explosives that have a fire hazard and either a minor blast hazard or a minor projection hazard or both, but not a mass explosion hazard.

Division 1.4 Explosives are materials that pose a minor explosion hazard. The explosive effects are largely confined to the package and no projection of fragments of appreciable

size or range is to be expected. An external fire must not cause virtually instantaneous explosion of almost the entire contents of the package.

Division 1.5 Explosives are very insensitive explosives. This division is comprised of substances that have a mass explosion hazard but which are so insensitive that there is very little probability of initiation or of transition from burning to detonation under normal conditions of transport.\

Division 1.6 Explosives are extremely insensitive articles which do not have a mass explosion hazard. This division is comprised of articles that contain only extremely insensitive detonating substances and which demonstrate a negligible probability of accidental initiation or propagation.

NFPA 1124 at 3.3.30.1 defines consumer fireworks as “Small fireworks devices containing restricted amounts of pyrotechnic composition, designed primarily to produce visible or audible effects by combustion, that comply with the construction, chemical composition, and labeling requirements of the U. S. Consumer Product Safety Commission (CPSC), as set forth in CPSC 16 CFR 1500 and 1507, (USDOT) 49 CFR 172, and APA Standard 87-1.”

- So:
- (1) Each consumer fireworks item must meet the specific construction requirements of USDOT and CPSC.
 - (2) Individual consumer fireworks items must be labeled as required by CPSC.
 - (3) Consumer fireworks must be contained in USDOT-approved boxes in interstate commerce that are correctly placarded 1.4G.
 - (4) Consumer fireworks must be contained in USDOT-approved boxes in interstate commerce that are correctly listed as UN 0336.
 - (5) Consumer fireworks must be contained in USDOT-approved boxes in interstate commerce that list the EX numbers of all fireworks items in the box.
 - (6) Consumer fireworks must be contained in USDOT-approved boxes in interstate commerce that meet minimum USDOT construction standards.

In addition, most consumer fireworks imported into the United States are brought into the country by fireworks companies that are voluntary members of the American Fireworks Standards Laboratory. Approximately 80% or more of all of the consumer fireworks items in commerce in the United States are imported and sold by AFSL companies. AFSL standards exceed all federal standards. AFSL does random and unannounced testing at consumer fireworks factories to ensure compliance with all federal and AFSL standards. For example, in 2009, AFSL did more than 7,000,000 tests of consumer fireworks items.

On each USDOT approved shipping carton there is a uniquely numbered AFSL label that resists removal and tampering. That label enables anyone wishing to do so to trace the contents of that box all the way back to the factory in which the items were made and, even more, to the batch of items that included the consumer fireworks items in the carton.

H. Hawaii fireworks laws

Prior to 1994, there was no state fireworks law. Each county had its own ordinance. If I recall correctly, Kauai and Oahu allowed non-aerial fireworks and firecrackers. Maui banned all fireworks. Hawaii allowed some aerial fireworks. There was a very substantial illegal aerials market in the city and county of Honolulu.

The 1994 Legislature passed and the Governor signed into law a single state-wide law that allowed non-aerial fireworks and firecrackers. The illegal market continued.

The 2000 Legislature imposed a \$ 25 permit fee on the purchase of up to 5,000 firecrackers and substantial increases on licensing fees for importers, storage, wholesalers and retailers. More than 40% of all retailers left the market. New more severe penalties were imposed. The illegal market continued.

The next major change occurred in 2010 with the passage of two bills. One, H.B. 1987 increases again the penalties for certain illegal acts. The other, S.B.1059 granted local option to the counties. As we all know, the city and county of Honolulu has banned all non-aerial consumer fireworks except firecrackers effective January the 2nd, 2011.

II. The issue; the problem

The problem is that there has been and continues to be a readily available supply and rampant use of aerial consumer fireworks and, to a lesser degree the use of display fireworks as well as the use of homemade improvised explosive devices.

No one has tried harder to address this problem than the legal, licensed non-aerial consumer fireworks industry.

III Discussion

A. Statistics

The “statistics” that have been presented to the Task Force just like the “statistics” that have been used by the police and fire departments in all legislative settings are largely either useless or misleading. The best effort to present “statistics” accurately and fairly was made by the County of Hawaii and the County of Kauai.

But, in reality, no one can tell from the numbers as presented whether the incidents, calls or events were the result of the possession or use of illegal explosive devices, the possession or use of improvised explosive devices, the possession or use of fireworks not

legal for possession or use by the general public without the required license or permit, the use of legal fireworks outside of the legal periods or in locations not legal under the State Fireworks Law or simply complaints from people unhappy about completely legal possession and use of legal fireworks.

One must wonder whether the “statistics” were presented in order to provide support for a legislative goal.

Without accurate statistics, we are all somewhat blind about what is really happening. And, if statistics are supposed to assist in enacting good legislative policy and aiding in the implementation of that policy, then we are severely handicapped.

Torture numbers, and they'll confess to anything. ~Gregg Easterbrook

98% of all statistics are made up. ~Author Unknown

Statistics are like bikinis. What they reveal is suggestive, but what they conceal is vital. ~Aaron Levenstein

Say you were standing with one foot in the oven and one foot in an ice bucket. According to the percentage people, you should be perfectly comfortable. ~Bobby Bragan, 1963

Statistics can be made to prove anything - even the truth. ~Author Unknown

Facts are stubborn things, but statistics are more pliable. ~Author Unknown

Do not put your faith in what statistics say until you have carefully considered what they do not say. ~William W. Watt

Then there is the man who drowned crossing a stream with an average depth of six inches. ~W.I.E. Gates

There are two kinds of statistics, the kind you look up and the kind you make up. ~Rex Stout, *Death of a Doxy*

I always find that statistics are hard to swallow and impossible to digest. The only one I can ever remember is that if all the people who go to sleep in church were laid end to end they would be a lot more comfortable. ~Mrs. Robert A. Taft

While the individual man is an insoluble puzzle, in the aggregate he becomes a mathematical certainty. You can, for example, never foretell what any one man will be up to, but you can say with precision what an average number will be up to. Individuals vary, but percentages remain constant. So says the statistician. ~Arthur Conan Doyle

Figures often beguile me, particularly when I have the arranging of them myself; in

which case the remark attributed to Disraeli would often apply with justice and force: "There are three kinds of lies: lies, damned lies, and statistics." ~Mark Twain, autobiography, 1904 (*but, as yet no actual record of this under Disraeli's authorship*)

The death of one man is a tragedy. The death of millions is a statistic. ~Joe Stalin, comment to Churchill at Potsdam, 1945

I can prove anything by statistics except the truth. –George Canning

In ancient times they had no statistics so they had to fall back on lies.—Stephen Leacock

Statistics are no substitute for judgment.--Henry Clay

Statistics show that of those who contract the habit of eating, very few survive.--George Bernard Shaw

B. Bans are easier to enforce

I have been involved in fireworks legislation at the state and local governmental levels since 1982. I have heard the claim that a complete ban would be easier to enforce hundreds if not more than a thousand times. It has never been shown to be the case. The opposite is true. The best laws and the best ordinances are those that allow law-abiding citizens an opportunity to celebrate the birth of their country and their religious and cultural heritage with some fireworks. Bans encourage some otherwise law-abiding citizens to decide that they will break the law in order to celebrate their heritage, their religious beliefs, their cultural values.

Fireworks in America are about celebrating our freedom from intrusive, controlling, oppressive government.

Furthermore, prohibition leads to a loss of control. The only successful strategy is to craft a law or an ordinance that strikes a careful balance between allowing enough fireworks so that the majority chose to be law-abiding and, therefore, not be part of the problem and not allowing anything at all.

Why should the rights of the majority be abridged because of the illegal acts of the few and the failure of those who are charged to enforce?

C. Resources are inadequate

How often of late have we heard this claim about almost everything. But, resources are limited. They must be used effectively and more efficiently. So, first, try using the current resources more wisely.

One thing is clear, S.B. 1059 allowed the City and County of Honolulu to enact Bill 34 and, if Bill 34 goes into effect on January the 2nd, 2011, the legal consumer fireworks industry will virtually cease to exist in the City and County of Honolulu and be of limited value to the other counties as a “partner”.

The discussion about cooperation among all parties will be exclusive of a legal consumer fireworks industry. It will essentially not exist. And those who profit from the illegal market will not be cooperating with anyone.

D. Licensed industry not the problem

The testimony of the Honolulu Fire Department that an undercover sting operation revealed that the legal, licensed non-aerial consumer fireworks industry was not involved in illegal sales is nothing except a statement of the obvious. Worse, the effect of S.B. 1059, which allowed Bill 34 to be enacted, has had the effect of punishing the law-abiding businesses and empowering the law-breakers.

The legal industry got killed and won't be there to participate in the solution to the problem of illegal fireworks. You will be on your own. And, based upon the performance over the past 17 years no one should have very high expectations on results.

E. Cargo inspections

According to one international source that compares international ports, the Port of Honolulu processed 1.3 million Twenty-foot Equivalent Units (TEU) in 2008. That is about 565,000 40-foot containers.

Testimony of representatives of the shipping industry suggested a different number: something in the order of 250,000 40-foot containers per year. Either way, that is a lot of freight containers coming in to Honolulu each week.

Other testimony suggested that about 15% of the total number of containers were coming from international ports and, therefore, under the jurisdiction of the United State Department of Homeland Security—Border.

If we use the lower of the two total estimates—250,000 containers per year—that means that about 200,000 to 220,000 containers each year come to Honolulu from United States mainland ports.

I believe that there is general consensus among all legal, law-abiding parties and all enforcement agencies that most, if not all of the illegal fireworks come from domestic ports.

My discussion with various legal consumer fireworks companies suggest that fewer than 100 containers worth of illegal fireworks are brought to Hawaii each year. Even if this estimate is low—say there are 200 containers worth or even 300 containers worth—of illegal product spread out as partial shipments in a larger total number of containers, finding that illegal product by searching the entire 200,000 to 220,00 containers is neither financially feasible nor logistically possible.

F. Storage and disposal of seized fireworks

Of course, there are two basic problems associated with “disposal of seized fireworks”. First of all, there is no attempt to distinguish between display fireworks, articles pyrotechnic, aerial consumer fireworks, non-aerial consumer fireworks and illegally manufactured explosive devices. Secondly, disposal of display fireworks, articles pyrotechnic and illegally manufactured explosive devices is much more costly and much more dangerous procedures. But, the disposal of all but aerial and non-aerial consumer fireworks is quite simple. They burn. So, put them in a completely enclosed container and ignite them. All that will be left will be ashes and a few small pieces of cellulose.

A suggestion was made that the seized fireworks—whether display fireworks, aerial pyrotechnics, aerial or non-aerial consumer fireworks—could be resold. For the most part, forget this idea. No legitimate fireworks wholesaler will seriously consider purchasing seized merchandise. There would not have been a readily identifiable person or company that had continuous control of the merchandise. So, there could never be any confidence that the product has not been degraded, destroyed or, even worse, so badly handled that it may have become dangerous.

By enforcing the law, the quantity of seized consumer fireworks items will decrease over time. But, again, the key is effective enforcement.

G. Controlling the supply of all fireworks would not mean controlling the supply of illegal fireworks

There is no s no evidence that any meaningful effort has ever been made to enforce the law. Therefore, there should not be any real confidence that the future will be any different than the past.

Furthermore, the ban on non-aerial consumer fireworks as a result of Bill 34—if Bill 34 does in fact go into effect—will severely and substantially reduce the legal supply of non-aerial consumer fireworks. But, that has never been the problem. The problem has been the mixing of aerial consumer fireworks and display fireworks or the deliberate importation and sale of aerial consumer fireworks.

The Honolulu Fire Department stated that the legal vendors of non-aerial consumer fireworks were found to be in compliance with the law. They were selling only non-

aerial consumer fireworks. So, again, there is no rational nexus or connection between overall supply of fireworks and the supply of illegal fireworks.

H. Product malfunction is not an issue

There is no evidence in Hawaii or anywhere else in the United States that product malfunction is associated with fires, injuries or illegal use. Period.

J. Product misuse is an issue

Product misuse is associated with fires and injuries. The actual facts and statistics bear this out. So, it stands to reason that product alteration—which is illegal under federal law and the State of Hawaii’s fireworks law—can result in fires, injuries as well. However, there is little verifiable evidence that product misuse is associated with fires or injuries. On its face, it seems logical. But, no data has been collected in such a way that any substantiated claims could be made. On the other hand, there is ample evidence that the use of illegal aerial consumer fireworks, illegally used display fireworks and illegally manufactured and used improvised explosive devices have been associated with injuries and fires.

If I recall correctly, the death of Councilman Garcia’s relative was associated with the use of an illegal fireworks item, perhaps even a display fireworks item.

I. The importation, storage and sale without the required license and the purchase, possession and use of aerial fireworks without the required permit have been illegal in Oahu for years and years.

Prior to 1994, each county had its own ordinance. Since 1994, state law has regulated who and under what circumstances and requirements the importation, storage and sale of all kinds of firework could occur. The 2000 change in the state law made the penalties even more severe. But, illegal importation, storage, sale, purchase, possession and use is rampant. Why? Failure to enforce.

J. Quote from the minutes of the presentation by Honolulu: “It is uncertain how much of a difference more resources would actually make in enforcement because fireworks violations involve many different issues.”

Quote from the minutes of the presentation by Honolulu: “More serious crimes will still take precedence” for use of enforcement resources.

Quote from the minutes of the presentation by Honolulu: “As a practical matter, increasing the volume of complaints received would only strain the resources more.”

These quotes from the minutes of the September the 21st, 2010, meeting of the illegal fireworks task force must have been accurate. No one on behalf of Honolulu asked to have these statements modified before the minutes were adopted.

And yet, these straight forward statements simply boggle the rational mind. Honolulu testified exactly one way in front of the State Legislature and the City Council: ban fireworks. Now, the representatives of the city admit that banning will not really lead to any meaningful results!

K. Civil citations

First of all, we have consistently and constantly testified for the State Fireworks Law to be amended to authorize the issuance of civil infraction citations. Honolulu never once supported that proposal. Honolulu testified exactly one way in front of the State Legislature and the City Council: ban fireworks.

Now, in Bill 34, the option has been enacted. I have doubts that the option as written in Bill 34 is in fact legal under the law. Senate Bill 1059 allowed counties to enact ordinances that are at least as restrictive as the state law. I do not believe this provision of Bill 34 meets that statutory hurdle. A change in the state law is required.

L. Education

First of all, we have consistently and constantly testified for the State Fireworks Law to be amended to authorize an educational effort. Honolulu never once supported that proposal. Our proposal to redirect some of the licensing fees to enforcement efforts and education was ignored by all.

Now, in Bill 34, the option is enacted. I have doubts that the option as written in Bill 34 is in fact legal under the law. The State Fireworks Law requires the licensing fees to be used for the fireworks auditor. Period. Senate Bill 1059 allowed counties to enact ordinances that are at least as restrictive as the state law. I do not believe this provision of Bill 34 meets that statutory hurdle. A change in the state law is required.

Furthermore, the legal consumer fireworks industry has a long, long history of taking the lead with educating the public about its products and how to use them safely and responsibly. Working with the US CPSC, the industry had developed a national program on safe and responsible use. Check out the CPSC website! Through its national trade association, education has been and remains a constant priority. Check out the APA website. At the state level and at local levels, the industry has developed programs, published advertisements and point-of-sale materials, broadcast public service announcements and paid licensing fees when a portion of them was and still is used for fireworks safety education. The legal, consumer fireworks industry does not need to apologize to anyone! It has done more than any other identifiable entity.

M. Need to focus on suppliers and not the users.

There is a lesson learned! However, in the City Council hearings, the Honolulu Fire Department admitted that it had never monitored licensed display fireworks importers, display fireworks storage or actual use of display fireworks. Isn't that a violation of their statutorily mandated responsibilities?

Worse, it has been the common belief of many that this conduit, this pathway, had been used for years to import and sell aerial fireworks illegally.

Obviously this is part of the correct strategy. But apparently, neither HFD nor HPD has done any of it. So, why believe that 2011 will be different particularly when you review the statements in the minutes about scarce resources and other priorities, read "more serious crimes", taking precedence.

N. Domestic transportation means looking for the proverbial needle in a haystack.

The only thing to say here is to refer to the numbers above about the volume of port traffic. According to some very preliminary research I did, a truck that could scan a container would cost somewhere between \$ 700,000 and \$ 1,000,000 just to buy. Then, there are the staffing and costs of operating and maintaining the vehicle. Then, if I recall correctly from an earlier discussion, an average of about 5,000 or more containers come into Honolulu each week. That means an average of about 125 would have to be processed—scanned—each hour. So, how long does it take for the scanning unit to scan a 40-foot container? There is your multiple needed to find out how many of those specially equipped trucks costing \$ 1,000,000 will be needed. Finally, there is the physical space logistics. No comment.

Obviously, this issue is much bigger than looking through 200,000 or more containers for the 100 or 200 that might contain fireworks that are not listed on the manifest. And, then, what if fireworks are listed on the manifest? The machine does not give that kind of detail.

Again, this is an issue much bigger than fireworks.

O. Enforcement needs to be more proactive—enforcement needs to happen with a reasonable level of effort.

No more correct statement was ever made. We have been preaching enforcement, begging for enforcement.

P. Cooperation between affected parties.

Cooperation maximizes the effectiveness of the overall effort. The whole is greater than the parts.

One part—the legal non-aerial consumer fireworks industry—will be gone. Senate Bill 1059 and Bill 34 made that happen.

References:

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3. Title 49 United States Code and Title 49 Code of Federal Regulations Parts 100 – 185, and American Pyrotechnics Association Standard 87-1 (January 1, 2001) (United States Department of Transportation).
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