

A F S L N E W S

NEWS IN BRIEF

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AFSL — A MODEL FOR OTHER INDUSTRIES

During the 2008 Fourth of July season, AFSL was the subject of increased media and public attention as a positive example of how industries can address compliance and quality issues for products manufactured in China. This has led other industries that source primarily from China to look at the AFSL model for their own product lines.

The driving force behind the increased attention has been the Consumer Product Safety Commission's frequent references to the out-

standing job that AFSL is doing for the fireworks industry. For a news release issued by AFSL during the Fourth of July season, CPSC Acting Chairman Nancy Nord stated that AFSL "has been an important ally to CPSC's ongoing efforts to make fireworks safer in the United States" and that "AFSL-certified fireworks consistently meet federal requirements at a far higher rate than non-AFSL products." She also stated that "the CPSC-AFSL relationship is an excellent example of how government, industry and consumer representatives can work together to improve product safety for American consumers."

In the CPSC's own public safety messages this year, the agency cited AFSL's work to eliminate lead in fireworks devices as an example of the program's success. In a story appearing in the Omaha World Herald, CPSC Director of Media Relations Julie Vallese stated "In the case of fireworks, the AFSL standard, prohibiting the use of lead in fireworks, seems to be working". Referring to the fact that the CPSC fireworks regulations do not specifically ban lead, she noted that

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STANDARDS COMMITTEE DEVELOPING OBJECTIVE TEST FOR BREAK CHARGES

The AFSL Standards Committee is evaluating a test method that could be used to distinguish legal break charges in aerial devices from overloaded aerial reports. When completed, it could resolve a long-standing conflict between CPSC and the fireworks industry as to what constitutes an overloaded aerial report.

The AFSL Standards, DOT regulations and

CPSC enforcement policy, define permissible

break charges as black powder or equivalent. Any powder that is not black powder or equivalent may be classified as an aerial report and failed for overloading if it exceeds 130 milligrams of pyrotechnic composition.

Currently, CPSC determines if a break charge is equivalent to black powder by listening to the device function and



Steel Cylinder with 600- gm weight, plastic vial, and ruler being evaluated for Break charge test.

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AFSL FUNDS FIRE TESTS FOR RETAIL STORES

AFSL funded a series of tests designed to validate standards for materials to impede the ignition and the spread of flames in a fireworks retail store environment.

The tests, conducted by Southwest Research Institute, San Antonio, TX November 2007 to January 2008, involved simulat-

of flame from one shelf to another, and tests were conducted with sprinkler system installed to complement the other protective measures being used. Finally, tests were conducted using pallets of "safe and sane" consumer fireworks. A total of twelve burn tests were performed for the project.



Setup of three retail shelves stocked with full Class C consumer fireworks with covered fuses, flame breaks, and restraints to limit movement of aerial devices.

ing a fire in a retail store with a series of three rows of shelving stocked with a variety of full 1.4G consumer fireworks. Tests also were conducted using "Safe and Sane" fireworks on pallets. A total of 12 tests were conducted.

Tests were conducted with completely unprotected fireworks initially to gauge how quickly flames would spread once the fireworks were ignited. Next, various types of protection designed to impede the spread of the flames were introduced. Some tests were performed on fireworks with fuses that were protected by fuse covers made of fire retardant materials; other tests included restraining mechanisms designed to limit the movement of aerial devices after ignition occurred. Flame breaks on the retail shelves were added to impede the spread

The purpose of the testing project was to validate provisions that have been incorporated into NFPA Standard 1124 to retard flame spread in a retail fire, including covered fuses, flame breaks, restraints for aerial devices, and sprinkler systems.

While a final report of the findings from the study has not been published, the preliminary conclusions reached indicate that the various protective measures employed were effective in decreasing the ability to start a fire and in slowing the spread of a fire once ignition occurred. The tests also showed that with all protective measures in place, numerous devices remained unburned with fire damage confined to the ignition area.

The testing was monitored by a Task Force appointed by the NFPA Committee on Pyrotechnics. The Task Force is chaired by Dr. John Conkling and includes Rick Thornberry, Consultant to the APA; Jerry Farley, Consultant to TNT Fireworks; Bill Weimer, B.J. Alan Company; Ted Gord, Thunder Fireworks; and Jerry Wingard, South Carolina Pyrotechnics Board.

The AFSL Board approved funding of the project last year at the request of the Committee on Pyrotechnics Task Force. The project is ex-

pected to cost an estimated \$225,000 when completed.

Provisions relating to materials used as fuse covers will also be incorporated into the AFSL Standards and included in the testing program for consumer fireworks.

CONSUMER SLOT FILLED ON STANDARDS COMMITTEE

A long-standing vacancy in the consumer representative slot on the Standards Committee was filled last month when the Board appointed Anne Craigmyle of Springfield, MO to the Committee. Mrs. Craigmyle is a full time homemaker, wife of an emergency room physician, and mother of three sons, ages 7 to 13. She has a history of working as a volunteer in various school-related activities, and has served on the PTA Executive Board for 6 years. She is familiar with all types of consumer fireworks.

In her letter to the Board she stated "My family and I like fireworks. I would enjoy helping to ensure safe fireworks are available and labeled properly. I feel this would be just another way that I could help my community and communities across the nation.

Mrs. Craigmyle attended her first Standards Committee meeting on August 15-16, 2008. With her knowledge of fireworks and strong commitment to consumer safety, she brings to the Committee a valuable consumer perspective that has been missing for the past several years.

TESTING VOLUME DOWN, COMPLIANCE RATE STEADY FOR 2007

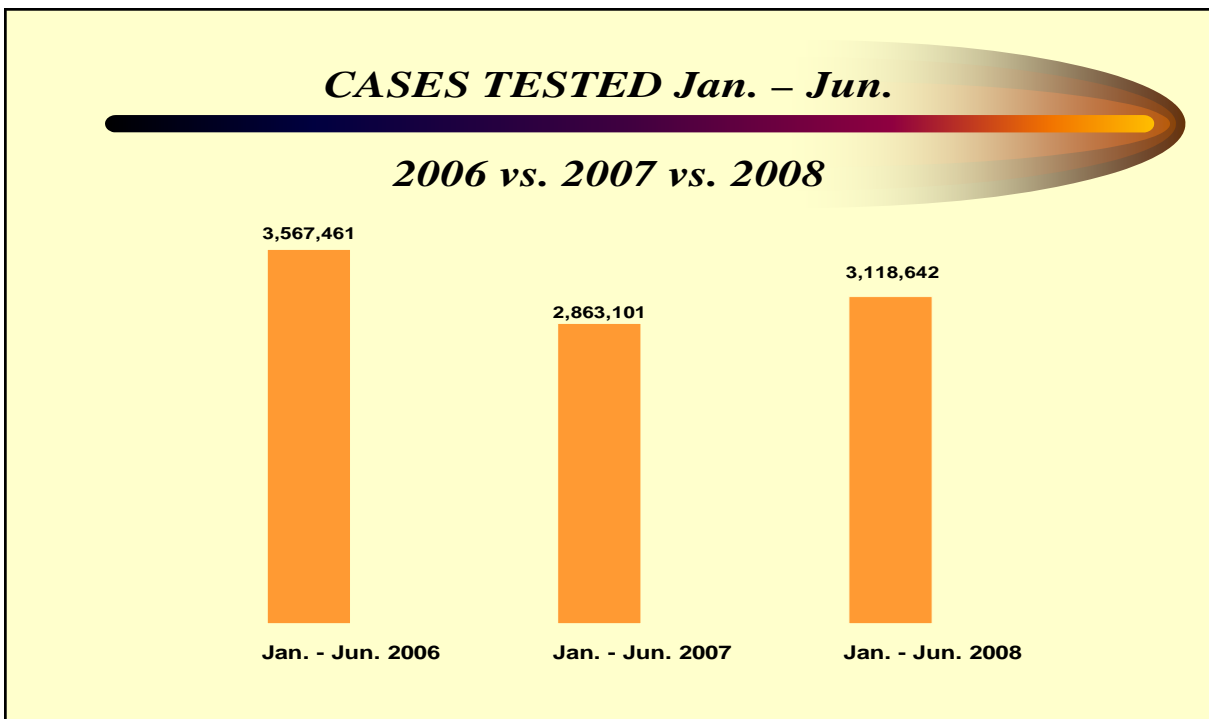
The volume of fireworks tested under the AFSL Quality Improvement Program (QIP) declined sharply in 2007. 5.9 million cases were tested by AFSL in 2007, compared to 7.1 million cases tested in 2006. This decline was attributed to an overall reduction in the number of fireworks imported in 2007. While the volume was down, the compliance rate for

fireworks tested by AFSL remained at 93%, matching the record high level of 2006.

Chart # 1 below, shows the types of violations that caused lots to fail most frequently. The most common cause for failure was cautionary label wording, followed by tilt block test failures, aerial effects that functioned

below 6 meters, and Fuse side ignition failures.

Chart # 2 below shows that in the first half of 2008, the testing volume was higher than during the comparable period in 2007. AFSL will be closely monitoring the second half of the year to see if this trend continues.



AFSL A MODEL

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where voluntary safety standards are working, the Commission does not mandate standards.

The positive comments from CPSC representatives are the latest in a series of events that have increased AFSL's public profile. In February 2008, AFSL Executive Director, John Rogers participated in the International Consumer Product Safety and Health Organization (ICPHSO) meeting in Washington, DC. AFSL appeared on a panel to discuss the challenges associated with re-exporting non-complying or recalled consumer products. Other participants included Gibb Mullen, CPSC's Director of Compliance, former CPSC Commissioner, David Pittle, and General Counsel to the Toy Industry Association, Rick Locker.

AFSL advocated that, given the difficulty of domestic destruction of fireworks, the re-exportation of fireworks in some instances is necessary and should not be prohibited. AFSL further emphasized that because of the high compliance rate for imported fireworks, re-exportation is seldom an issue. Rogers cited CPSC statistics that show there have only been 12 fireworks recalls in the past fourteen years since AFSL started testing. And many of the recalls were for products that did not go through AFSL testing.

In September 2007, CPSC hosted the a U.S.- Sino Consumer Product Safety Summit in Washington, along with their counterpart agency from China, AQSIQ. The summit included meetings to discuss bilateral cooperation in assuring that products shipped from China meet U.S. government regulations and voluntary consensus standards.

In conjunction with the summit, AFSL hosted and co-sponsored a reception and dinner for the China

delegation and CPSC participants. Co-sponsors included the Toy Industry Association, the U.S. Asia Business Council, and AFSL. The dinner was a huge success, and as the primary organizer and host for the dinner, AFSL received accolades from the participating delegations.

AFSL also participated in a televised panel discussion with Underwriters Laboratories, Walmart, Mattel Toys, and the Toy Industry Association to address industry experiences with Chinese manufactured products. AFSL was asked to focus on its long-term, successful product certification program in China and the impact it has had on the American marketplace.

These examples of the very positive attention being focus on the fireworks industry are a far cry from the early 1990's when fireworks were in danger of being banned due to the high injury rates and the failure of imported fireworks to comply with U.S. regulations. Prompted by increased CPSC surveillance of imported fireworks, and several lawsuits to require companies to test their products, key industry leaders responded by establishing the AFSL.

One AFSL Director summed up the situation very nicely when he said "The fireworks industry has now gone from being the whipping boys of the government to being the poster boys for consumer product safety. AFSL members deserve a great deal of credit and congratulations for helping to bring the fireworks industry to this remarkable turnaround."

BREAK CHARGE TEST

(Continued from page 1)

evaluating the audible effect produced. If the device produces a loud, sharp crack when it functions, rather than a softer break characteristic of black powder, CPSC will fail the device. Neither CPSC nor AFSL have established objective criteria for determining when a device is too loud. As a result, it is not uncommon for CPSC and AFSL to reach different conclusions in determining how loud is too loud.

The procedure being developed by the Standards Committee involves the use of a cylindrical steel tube with a removable, 600-gram round steel ball placed on top of the metal cylinder. One gram of break charge composition is placed inside a plastic vial and a lid is glued onto the vial. An electric match is inserted into the plastic vial which is then placed inside the metal cylinder and ignited. The force of the explosion is measured by the height to which the 600-gram ball is projected into the air when the charge explodes.

The Committee has obtained preliminary measurements for black powder as well as for flash powder, and a variety of other combinations that currently are being used as break charges in China manufacturing. Once consistency of results is established, the Committee will establish an optimum performance level for black powder and define what is considered to be equivalent to black powder.

If accepted by CPSC and DOT, this test procedure would be implemented by AFSL in its testing program in China. It would also be used by CPSC in evaluating samples tested by the agency. DOT also would use the procedure for EX numbers approvals. Both

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CHANGES TO AFSL STANDARDS

NEW CAUTIONARY LABELING FOR HELICOPTERS. The Standards Committee and Board approved a change in the cautionary labeling for helicopter devices which requires the statement of hazard ***“SPINS UPWARD. EMITS SHOWERS OF SPARKS.”*** This replaces the existing statement of hazard ***“EMITS SHOWERS OF SPARKS”***. This change was made to give consumers specific information about how helicopters function and was requested by an AFSL importer member who believes that the current warnings for helicopters is inadequate. The effective date for the change is **September 1, 2009.**

METALLIC COMPONENTS IN AERIAL DEVICES. The Standards Committee recommended and the Board approved a provision that prohibits the use of metallic components in aerial devices. The provision states ***“Streamers used in devices subject to this standard must be constructed of flame retardant and non-electrically conductive material.”*** for This modification was made as a result of an incident where a child suffered an electrical shock and burn when she touched a metallic streamer attached to a parachute that had landed on an electrical power line. The incident occurred just prior to the Fourth of July this year. The importer initiated a voluntary recall of the product.

The provision is included in the Standards for Comets, Mines and Shells; the Standard for Reloadable Tube Aerial Shell Devices; the Standard for Rockets, Missiles, and Helicopters; and the Standard for Combinations. The effective date for the provision is **January 1, 2009.**

NEW CAUTIONARY LABELING FOR BASE WHISTLES. The Standards Committee recommended and the Board approved a modification in the cautionary labeling for Base Whistles in the Standard for Fountains. The existing cautionary labeling was amended to add the statement ***“PLACE UPRIGHT ON LEVEL SURFACE.”*** The Committee noted that this was an obvious omission in the labeling requirement since all other devices that are operated on the ground must bear comparable use instructions.

The existing labeling is consistent with the requirement in the CPSC regulations; however, CPSC representatives on the Committee believe it also was an oversight in the CPSC regulations. The effective date for the new provision is **September 1, 2009.**

The Standards Committee also is developing requirements for the following items for consideration by the Board:

(1) A standard for Combination Aerial Shell and Girandola devices. Although similar to a helicopter in function, girandas currently are not tested by AFSL due to the lack of specific test procedures for this unique device.

(2) A standard for Reloadable Fountains. The reloadable nature of this product makes them different from regular fountains and test procedures and labeling need to be developed before AFSL begins testing these items.

(3) A Standard for Crackling Whip devices. The original AFSL Standards do not address this device

These provisions are expected to be presented to the Board for consideration in February 2009.

LEAD IN FIREWORKS TARGETED BY TESTING PROGRAM

A significant number of fireworks manufactured in China contain lead in excess of the legal limit, according to a recent report received by AFSL.

Based on the results from 400 samples tested for lead in 2007, 9% contained lead in excess of the 0.06% limit contained in the AFSL Standards. While it had been widely suspected that lead was being used by some manufacturers of fountains and other small devices with crackle effects, the recent findings show that the most common items to contain lead is mine and shell devices. In 2006, 11% (28) of the 200 samples tested contained excess lead.

Despite the slight decline in failure rates, given the health risks associated with lead, AFSL is continuing to press factories to remove all lead from fireworks devices.

The CPSC regulations do not ban lead as a prohibited chemical for fireworks; however, in 1999, AFSL included a prohibition on lead in excess of 0.06 parts per million, consistent with the CPSC ban for toys.

The lead screening program has been running since the 1999 prohibition. If AFSL finds lead present, we refuse to accept those products for further testing until the factory can demonstrate through a certified test report from an independent laboratory that it has removed the lead.

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BREAK CHARGE TEST

CPSC and DOT have indicated a willingness to consider accepting the Standards Committee's procedure. Two key people in the CPSC fireworks enforcement program: Jim Joholske from the Office of Compliance and Neal Gasser who is responsible for fireworks testing at CPSC, are members of the Standards Committee, and are actively involved in developing the test procedure. DOT has two representatives on the Committee as well, Harpreet Singh and Vallary Maxey from the DOT Approvals office.

The remaining challenge for the Standards Committee is in reaching an agreement with the two agencies as to where the performance level should be set to define black powder equivalency.

Once a procedure is agreed to by the Standards Committee it will need the approval of the Board before being presented to CPSC and DOT for acceptance. While the performance level has not been set by the Committee, it is expected that wherever the level is set is likely to dramatically impact some aerial devices with break charges that already are in the market. In recent years, the industry has moved to louder, more active break charges that are combination compositions that in some instances sound nearly as loud as flash powder break charges.

The positive impact though for AFSL members is that all companies would be held to the same performance standard for break charges, whether their products are tested by AFSL or not, because CPSC and DOT would be using the same standard for approving products that are not tested by AFL. AFSL hopes to have the standard set by the end of this year.

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