AMERICAN FIREWORKS STANDARDS LABORATORY

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# AFSL NEWS

#### **NEWS IN BRIEF**

CPSC CONSIDERS MODIFY-ING FIREWORKS REGULA-TIONS. CPSC published an Advance Notice of Proposed Rulemaking laying out several options for modifying the existing fireworks regulations. Comments were due to CPSC on September 11, 2006.

**CPSC ACTING CHAIRMAN** NANCY NORD ADDRESSES AFSL MEETING. CPSC Acting Chairman Nancy Nord addressed the fireworks industry at the AFSL General Membership Meeting in Nashville in September. She lauded the efforts by the industry to improved compliance and safety through the AFSL certification program. She also discussed CPSC's pending rulemaking proposal which could result in modifications to the existing regulations. Page 1.

#### SAMPLE SIZE REDUCED FOR LARGE MINES/SHELLS; FOUNTAINS. AFSL has reduced the sample size for large mine

and shells and fountains from 25 to 10 samples per lot. The reduction will result in significant savings in testing costs. **Page 2.** 

CERTIFICATION TRAINING PROGRAM CONDUCTED IN LIU YANG. AFSL conducted the annual technician certification program in Liu Yang in August. Page 5.

**ELECTION RESULTS.** Jerry Bostocky, Mike Ingram and Richard Shields were re-elected to the Board. **Page 6.** 

# CPSC CONSIDERS CHANGES TO FIREWORKS REGULATIONS

The Consumer Product Safety Commission (CPSC) published a notice in the federal register July, 2006 announcing that it is considering whether there may be a need to update and strengthen its regulation of fireworks devices.

The Advance Notice of Proposed Rulemaking ("ANPR") published by CPSC on July 12, 2006, is the first step in initiating a rulemaking proceeding by CPSC. In the ANPR, the Commission solicited written comments concerning the risks of injury associated with fireworks that don't meet the existing CPSC fireworks regulations. The ANPR also solicited comments on several regulatory alternatives that CPSC could consider to address risks of injury and on the economic impact of the various alternatives.

Following are the four regulatory alternatives spelled out in the ANPR that could be considered by CPSC:

**1. Mandatory Certification.** The Commission could issue a rule requiring mandatory certification to the fireworks device regulations of the FHSA. This would encourage manufacturers to conduct testing or make use of independent testing laboratories as a basis for certification.

**2. Mandatory Standard.** The Commission could issue a rule specifying certain additional requirements fireworks devices must meet. The Com-

(Continued on page 3)

## CPSC ACTING CHAIRMAN ADDRESSES GENERAL MEETING, LAUDS INDUSTRY SAFETY EFFORTS

In her first meeting with the U.S. fireworks industry, Nancy Nord, Acting Chairman of the Consumer Product Safety Commission, commended AFSL members for their efforts in improving fireworks safety and compli-"In coming toance. gether to establish the AFSL, you saw the value in going beyond the CPSC mandatory standard to address both necessary improvements to our standard and to address new products and product developments that the government standards did not ," she said.

Chairman Nord's comments were made at the AFSL General Membership Meeting in Nashville, TN on September 13, 2006. She spoke about her impressions of the AFSL certification program for fireworks manufactured in China for the U.S. market. Describing the



industry actions as being "ahead of the curve", she cited

## SAMPLE SIZE REDUCED FOR 500-GRAM MINE AND SHELLS, FOUNTAINS

Responding to concerns expressed by members about the high cost of testing 500 gram fireworks devices, AFSL has lowered the sample size for two of the three categories of the devices. Effective immediately, Mine and Shell devices and Fountains will be sampled and tested using a reduced sample size. A decision to reduce the sample size for Combination devices is being delayed, pending further study.

Under the current sampling plan, AFSL typically tests 25 pieces of the 500 gram items to reach the appropriate confidence level. The revised sampling plan will permit the testing of 10 units in a typical lot for each of the two categories.

The greatest benefit of the reduction will be realized in larger lot sizes that contain more than 500 individual mine and shell or fountain items. Currently about half of all mine and shell lots and 85% of all fountain lots tested by AFSL fall into this category. Shipping Lots of items containing less than 500 individual units will continue to require testing of 10 units from each Lot.

When testing is performed using a statistically valid sampling plan such as that employed by AFSL, it is critical to maintain a specified sampling level to assure the testing adequately evaluates the likelihood that individual items within a shipping Lot complied with applicable requirements. This is referred to as the "confidence level" for the sampling plan.

The sample size may be reduced only when the level of compliance in each of the criteria evaluated (such as fuse burn time and tipover) has remained above 95% for a period of at least one year.

To determine whether the reduced sampling plan could be implemented, AFSL conducted an evaluation of testing data for more than 2000 lots of 500 gram devices tested September 2005 to January 2006. The data showed the overall compliance rate for each criteria evaluated in the Mine and Shell and Fountain categories was greater than 95%. Given the high compliance rates, the sampling level could be reduced without lowering the confidence level for the sampling plan.

The failure rate for the category of Combinations, by far the smallest of the three categories, was too high (14%) in some areas to allow for a reduction in the sample size at this time. AFSL will continue to monitor this category and consider additional reductions in the future.

The reduction in sample size and resulting cost savings to members is a continuation of efforts by AFSL to lower overall costs of the testing program for AFSL members. A similar reduction in sample size was implemented several years ago in the category of Firecrackers. That reduction was made after firecrackers had maintained a better than 95% compliance level for one year.

AFSL is continuing to monitor data for other product categories and may take similar action to lower sample sizes as test results indicate such action is appropriate.

#### **CPSC CHAIRMAN SPEAKS**

(Continued from Page 1)

the recently implemented abuse test for reloadable launcher tubes as an example of the AFSL Standards addressing a problem as it was developing. "It was necessary to help avoid tube blowouts and was adopted by AFSL in a relatively brief time frame."

Although this was her first meeting with the industry in the U.S., Nord traveled with AFSL to meet with the fireworks industry in China in April 2006.

"I saw first-hand how the AFSL process works, including traveling to Liu Yang in Hunan Province to the Intertek/AFSL offices and out to the factories themselves to see testing in action", she said. "It was fascinating." She described a typical factory where she saw AFSL tested shipments bound for the U.S. as well as boxes bearing only the Chinese government stickers that may not have been thoroughly inspected. "I will tell you, I felt much better about the AFSL-tested product than I did about the other, and this feeling is certainly shared by our Office of Compliance."

Chairman Nord described CPSC efforts to work with China to improve communications and to address safety concerns as they arise, rather than after the fact. She views compliance with both CPSC regulations and AFSL standards as critical to the process. "Part and parcel of this is that fireworks be independently tested and certified to both standards."

Nord cited the significantly higher compliance rate of fireworks tested by AFSL during the past several years. "It clearly shows the benefit of a rigorous, independent standards and testing process", she said.

"Another aspect of the AFSL program that we appreciate and are encouraging all American indus-

#### **CPSC PROPOSING TO AMEND FIREWORKS REGULATIONS**

#### (Continued from page 1, col. 3)

mission is required to invite any person to submit to the Commission an existing standard or a portion of a standard as a proposed regulation.... If the Commission determines that any standard submitted to it in response to this invitation if promulgated ... would eliminate or adequately reduce the risk of injury, the Commission may publish the standard... as a proposed regulation.

3. Reliance on Voluntary Standard. The Commission is required to consider voluntary standards in its mandatory rulemaking. Specifically, the Commission is required to invite any person to submit to the Commission a statement of intention to modify or develop a voluntary standard to address the risk of injury.... If the Commission determines that compliance with a standard submitted ... is likely to result in the elimination or adequate reduction of the risk of injury identified in the notice, and it is likely that there will be substantial compliance with such standard, then the Commission must rely on the voluntary standard to eliminate or reduce the risk of injury.

**4.** Corrective Actions Under Section **15** of the FHSA. The Commission has authority under section **15** of the FHSA, to pursue corrective actions on a case-by-case basis if the Commission determines that a product constitutes a banned hazardous substance.

AFSL submitted comments to CPSC on behalf of its membership. AFSL's comments included (1) a request that CPSC establish a mandatory certification program for the existing CPSC fireworks regulations that would require all companies to have their products tested by an independent, third party certifier; (2) a request that CPSC formally rely on AFSL's existing voluntary standards; and (3) a request that CPSC require companies to report to CPSC under Section 15 of the CPSA if they import or distribute fireworks that do not meet specific provisions of the AFSL Standards relied on by AFSL.

AFSL believes that reliance on the AFSL standards, in conjunction with mandatory reporting under Section 15 will result in an adequate reduction in the risks of injury from fireworks and that it is likely there will be substantial compliance with the voluntary standards should CPSC choose to rely on them.

The AFSL Standards provide significantly broader coverage of the potential risks of injury associated with fireworks than the existing CPSC regulations. The CPSC regulations were published in 1976, before some of the most popular items in the market today existed. This includes items such as reloadable shell devices and 500 gram multiple tube items such as mines and shells, fountains and combinations.

The AFSL Standards incorporate all the CPSC fireworks regulations, along with applicable DOT regulations. AFSL also has incorporated into the Standards a wide range of provisions to address potential hazards in newer products as well as previously unidentified hazards associated with older fireworks designs.

AFSL believes that the injury trends of recent years validate the effectiveness of the AFSL Standards in reducing the risks of injury addressed in the ANPR. Since 1994, the year AFSL established the certification program, the actual number of injuries associated with fireworks has declined or stabilized. Further, the rate of injuries compared to the amount of product in use has declined dramatically. In 1994, the injury rate per 100,000 pounds of fireworks used was 10.7. In 2005 the rate declined to 3.8.

With respect to the requirement that there is likely to be substantial compliance with the AFSL Standards, AFSL commented that an estimated 80% of the U.S. consumer fireworks industry currently has its fireworks certified in China prior to shipment to the U.S. AFSL believes this number will increase significantly, if CPSC formally relies on the AFSL Standards.

Finally, with respect to the mandatory reporting requirement, AFSL believes that in order for companies to adequately report to CPSC whether its products comply with the AFSL Standards, and if not, which specific provisions are not being met, companies will have to rely on an independent third party testing program to confirm which standards provisions are not being met.

Comments on the ANPR were due to CPSC on September 11, 2006. A complete copy of the ANPR as well as the Comments received by CPSC may be obtained from the CPSC website: *www.cpsc.gov.* AFSL members may also contact AFSL to obtain a copy of the ANPR as well as a copy of the AFSL comments memorandum submitted to the CPSC.

CPSC currently is reviewing the comments received and will make a decision as to which options, if any, will be approved by the Commission. It is likely to take several months before a decision is announced by CPSC. Once a decision is reached, CPSC would then publish a Notice of Proposed Rulemaking and interested parties will be invited to submit additional comments.

## VOLUME AND COMPLIANCE RATE CONTINUE TO IMPROVE UNDER TESTING PROGRAM

Testing under the China Fireworks Quality Improvement Program increased to 6.1 million cases in 2005; a 20% increase over 2004. The compliance rate for all products tested increased to 91%, up one percentage point. The following tables summarize the volume and compliance rate by year.



#### **CPSC CHAIRMAN SPEAKS**

#### (Continued from page 2)

tries to adopt is direct engagement and testing in China, before products even reach U.S. Ports.

This not only saves you the cost of having to ship products that may be turned-back at the ports, but also helps prevent violative and defective products from entering the stream of commerce and possibly causing injury." She described this process as a "win-win for industry and consumers alike."

Describing the cumbersome process of modifying federal regulations, the Chairman added "That is one of the reasons why I supported and voted in favor of the recently-issued advance notice of proposed rulemaking for fireworks. This notice outlines a number of options the Commission could take to bring our enforceable standards up-to-date to address both current fireworks products and current incident patterns."

She went on to add that "While AFSL clearly is at the forefront of industry testing, we cannot today and could not under a new certification requirement, endorse any single testing entity over another so long as we have adequate assurances that a testing and certification system is sufficiently valid."

After giving the industry high marks for its efforts to address compliance and safety concerns, Chairman Nord issued a stern warning to companies that continue to import and distribute noncomplying fireworks. Noting that CPSC has initiated investigations of several companies for distributing noncomplying fireworks, she made it clear that companies who disregard the CPSC mandatory regulations would be subject to aggressive actions by the Office of Compliance.

Chairman Nord was warmly received by the AFSL membership.

#### (Continued from page 4)

Her appreciation of the industry's compliance and safety efforts, as well as a willingness to work cooperatively with the industry to achieve common goals struck a very positive cord.

Nord was appointed to the Commission by President George Bush in June 2005 and is serving a term which expires in 2012. She was named Acting Chairman by the White House following the resignation of former Chairman Hal Stratton in July of this year. Nord will continue as Acting Chairman until the Bush administration appoints a permanent Chairman. An appointment by the White House is expected in the coming weeks.

Following the Chairman remarks, Jim Joholske, from the CPSC Office of Compliance, described the ongoing CPSC enforcement program efforts. Citing the reasons why CPSC focuses most resources on non-AFSL tested fireworks. Joholske stated that in 2005, 5% of AFSL tested samples had significant violations compared to 36% of non-AFSL tested samples.

However, he stated that in 2006 CPSC has seen an increase in AFSL violations due to 15 samples with long fuse burn time violations. He is providing data to AFSL to assist in determining the cause for the sudden increase in long fuse burn time failures.

Mr. Joholske also cited over-

loaded reports as the other violation that CPSC finds most frequently. 52% of all violations in 2005 were in this category. "These are the types of violations that concern us and that we will continue to focus on in the future," he said.



## **TECHNICIAN CERTIFICAN PROGRAM** CONDUCTED IN LIU YANG



AFSL conducted an on-site training and re-certification pro-

Liaison William Zhou, also participated in the session.

gram for technicians who test fireworks under the Quality Improvement Program. The program, held August 14-19, 2006, in Liu Yang, Hunan, is intended to assure that technicians are proficient in testing procedures and that there is uniformity in the application of the standards by all technicians.

Fifty field technicians, and 5 Data Management Clerks participated in the training, conducted AFSL Executive Director.

John Rogers. AFSL Director Dr. John Conkling, and AFSL China



Executive Director John Rogers presented award to Paul by Peng who scored the highest in the exam.

The program included two and one-half days of classroom instruction, covering all changes in the AFSL Standards during the past year. Also covered were primary areas of concern identified by AFSL as well as the technicians themselves, and a detailed discussion of the ethical standards of conduct which all technicians must abide by.

The training included one day of field exercises addressing such areas as proper fuse burn time testing, and identifying devices that contain aerial reports, based on the loudness of the sound. At the conclusion, a written examination was adminis(Continued from page 5)

tered by AFSL which all technicians must pass annually in order to become or remain certified. The exam which is comprehensive and challenging was passed by all but four of the technicians. They will be reassigned for further training before continuing as primary testers.



John Rogers presented Certificate of Service to Zola Zou for his over 10-years service in the program.

Four Technicians that scored the highest on the exam were presented with incentive awards at a dinner hosted by AFSL. Awards were presented to Paul Peng, Gerry Li, Band Hu and Manson Huang.

Certificate of Service Awards for ten or more years of service to the testing program also were presented to three technicians: Zola Zou; Hilary Chen; and Chris Cai. Eight technicians received Certificate of Service for more than five years of service in the program: Annie Zhao, Sean Zhao, Mike Yin, Tony Gong, Janet Li, Case Ruan, Parry Chen, Lawrance Cai.

The Intertek Management Team and Technicians presented Dr. Conkling and John Rogers with bronze statues of Li Tian, known widely throughout China as the "Father of Fireworks".

The training program is conducted annually by AFSL, and is required training for all technicians who perform testing under the AFSL certification program.

### THREE DIRECTORS RE-ELECTED TO BOARD

Three Directors were re-elected to the AFSL Board of Directors at the General Membership Meeting September 13, 2006 in Nashville, TN. They are: Jerry Bostocky, B.J. Alan Company, who has served on the Board since the in-

ception of AFSL; Michael Ingram, Fireworks Over America, who was first elected to the Board in 2001 and serves as Secretary to the Board; and Richard Shields, current Treasurer, who also has served on the Board since AFSL was established.

All three Board Members elected were sitting Directors. Despite several efforts by the Nominating Committee to solicit additional candidates, the three Board members were un-

opposed on the ballot. One nomination was received from the floor during the balloting process, Debbie Rozzano-Gord, Thunder Fireworks.

The election of Directors is an open process wherein all members in good standing may nominate candidates for the Board. Board membership is determined by the vote of all members in good standing. Nominees for the Board must be a member in good standing of AFSL for a period of five years. Candidates serve for a period of three years and may be re-elected to successive terms on the Board.

Typically, for three seats on the Board, the ballot will include at least four nominees. This is intended to give all member companies an opportunity to serve on the Board. AFSL News is published by American Fireworks Standards Laboratory 7316 Wisconsin Avenue Suite 214 Bethesda, MD 20814 Telephone: 301-907-9115 Fax: 301-907-9117 E-mail: afslhq@afsl.org Website: www.afsl.org John D. Rogers, Executive Director

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