AMERICAN FIREWORKS STANDARDS LABORATORY

A F S L N E W S

MAY 2011 Volume - 46

NEWS IN BRIEF

DOMESTIC TESTING PROGRAM BEGINS. In February 2011, AFSL began testing in the U.S. fireworks manufactured in the U.S., imported as components, or assembled into Assortments. This allows domestic manufacturers to issue Certificates of Compliance for them. **Page 1.**

AFSL TESTING COMPONENTS IN CHINA. AFSL is now testing unfinished fireworks components manufactured in China prior to shipment to the U.S. Included are reloadable shell components, mine and shell components, etc. **Page 1.**

NEW STANDARDS ISSUED FOR RELOADABLE SHELL DESIGNS, RESIDUAL BURN IN FOUNTAINS, PACKAGING OF BOOBY TRAPS. The new requirements for shell design allow additional artwork and graphs on reloadable shells. Multiple tube fountains cases are prohibited for continuing to burn or reigniting after functioning. Booby Traps are limited to 12 pieces in an inner pack in the retail box. **Page 2.**

SMOKELESS FOUNTAINS ADDED TO AFSL TESTING PROGRAM. AFSL is testing fountains known as "smokeless fountains" that are being marketed this year but they must first have a valid EX number and must be tested for prohibited chemicals. **Page 3.**

NEW, HIGH SECURITY STICKERS NOW IN USE. **Page 5.**

TESTING PROGRAM IMPLEMENTED FOR DOMESTIC PRODUCTION

AFSL for the first time is testing and certifying fireworks manufactured or packaged in the United States. The domestic program was implemented on February 24, 2011.

The program allows U.S. companies to file Certificates of Compliance for domestically manufactured or packaged fireworks as required by the CPSC's new certification law that became effective in February 2010. Testing and certification are conducted by AFSL's contract testing laboratory, SGS, through its Tulsa, OK laboratory.

A Technician stationed in the Tulsa lab was specially trained and certified to perform testing during a month-long training course in China in the summer of 2010. Three different types of certification services are provided under the domestic program.

Certification of Assortment Packages. Assortments assembled in the U.S. from finished fireworks that previously have been tested and certified by AFSL in China may now be re-certified in the U.S. after they have been broken down from bulk packages and re-packaged as Assortments. No additional testing is required for these items. The program is essentially a sticker accounting and exchange program. In addition to regular Assortments, Sparklers that have been tested in China in bulk packages, then re-packaged once they arrive in the U.S. also are

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UNFINISHED FIREWORKS COMPONENTS NOW TESTED IN CHINA

In an effort to expand the range of services offered to members, AFSL has begun testing unfinished fireworks components under the China testing program. The program allows the components to be imported by members with AFSL certification prior to final assembly of the components into finished fireworks in the U.S.

During the start-up phase, four types of components will be tested as described below. Other types may be added depending on the needs of individual importers.

Aerial Mine and Shell Inserts. Aerial Mine and Shell Inserts consist of either single or multiple tube devices with or without bases attached and/or with or without fuses attached, that are unfinished and designed to be re-assembled into a finished fireworks device.

Reloadable Tube Aerial Shell Inserts. Reloadable Tube Aerial Shell Inserts are single shells (either single or multiple breaks) with fuse and orienting loop attached, that are packaged in a blister pack or

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AMENDMENTS, MODIFICATIONS TO STANDARDS APPROVED

The Board of Directors approved the following modifications /amendments to the AFSL Standards. Implementation dates are provided with each modification.

STANDARD FOR RELOADABLE TUBE AERIAL SHELL DEVICES — Some Restrictions on Shell Design Lifted.

An amendment to the design restrictions on the shells used in reloadable tube aerial shell devices was approved which will now allow shells to contain a company logo, and a description or depiction (graphic) of the effects contained in the shell. Company logos are limited to a size not exceeding 1" in any linear direction, and a description or depiction of the effects may not exceed 1.4" in any linear direction.

This amendment replaces existing requirements that limit graphics of the effects or brand name of the company to black text on white background, in type not exceeding 8/64 inch.

The Standards Committee recommended the change as a means of providing companies more flexibility in designing the shells. However, the Committee wanted to assure that the shells were not designed to look like a finished product that could be used outside the launcher tube. For that reason, the Standards Committee and Board decided to keep in place other restrictions that require all shell exteriors to have a single uniform color or finish without other decorations. The single color exterior may be either regular or foil paper. In addition, the Board decided to keep in place the prohibition on nose cones, fins or other ornamentation that could cause the shell to be confused with a finished fireworks device.

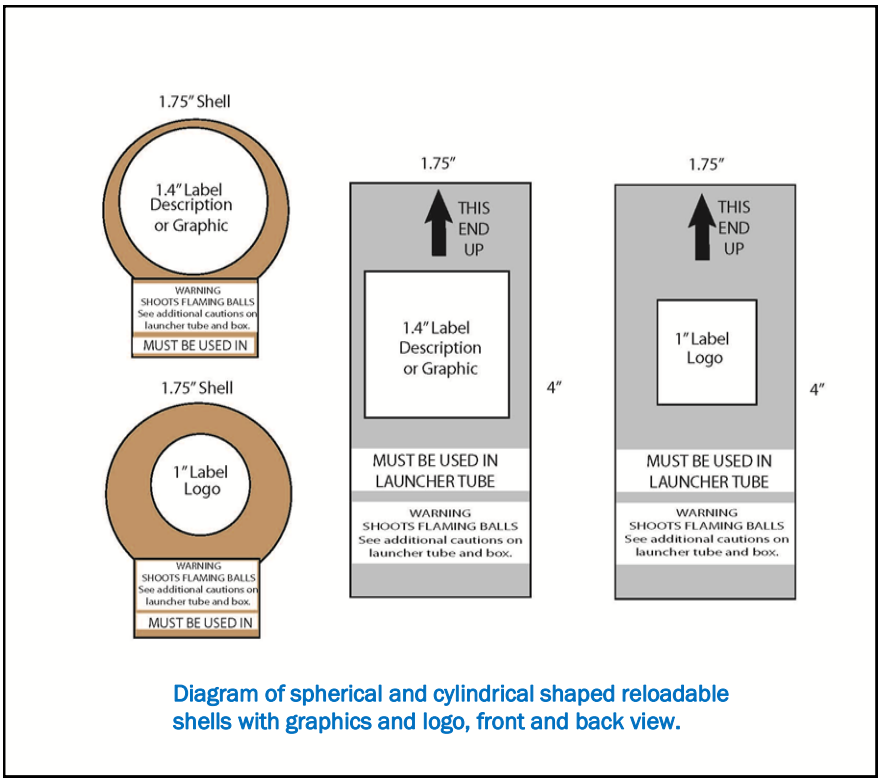

Diagram of spherical and cylindrical shaped reloadable shells with graphics and logo, front and back view.

The implementation date for the amendments is May 1, 2011. Shell designs that currently comply with the AFSL standard will continue to be acceptable until and after the May 1st date.

STANDARD FOR FOUNTAINS — Residual Burning in Casings.

The Board approved an amendment to the Standard for Fountains to address a recently identified risk of fountain casings continuing to burn or re-igniting once the pyrotechnic composition is extinguished. The new requirement in Section 2-1.8 of the Standard for Fountains states "***The finished item, including tubes and internal construction material, must not continue to burn or re-ignite after functioning."***

For this requirement, the Board delayed the implementation date until October 1, 2011, in order to allow time for the development of a test procedure to verify compliance with the requirement. The Standards Committee is considering several options, including a vertical flame spread test for internal construction materials but needs additional time to adapt a procedure to use in the field by AFSL technicians.

AFSL discussed the need to develop a testing procedure for this requirement with the factories in China during a meeting in April 2011 and requested that all suggestions for defining the procedure should be submitted within the next few weeks. This will permit the Standards Committee to develop and publish a procedure prior to the October 1, 2011 implementation date for the new requirement.

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Modifications to Standards

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STANDARD FOR BOOBY TRAPS — Limit of 12 units per inner package.

The Standard for Party Trick and Toy Smoke Devices at section 2-1.9.3 requires that Booby Traps must be packaged in an inner pack that contains not more than 12 units. In testing Booby Traps, the technicians reported that in some instances, retail boxes of Booby Traps contain several inner packages of the devices, usually packaged in a plastic bag. They requested clarification as to whether this type of packaging is permitted under the existing AFSL Standard.

The Standards Committee noted that the language "inner pack that contains not more than 12 units" was adopted from the DOT regulations and could not be changed without making the AFSL standard inconsistent with DOT requirements. The Committee also noted that the inner pack requirement was intended to create a buffer/shock absorber for transportation of these items.

Due to a concern that more than 12 booby traps within one retail pack could create a transportation and storage hazard, the Committee decided that such packaging should not be certified by AFSL. The Committee recommended, and the Board approved, an amendment to the Standard for Party, Trick and Toy Smoke Devices that includes the following language in Section 2-1.9.3: "*Booby traps must be packaged in a package meeting all requirements for retail sale that contains not more than 12 units.*" The effective date for the amendment is September 1, 2011. The requirement limiting Booby Traps to 16 milligrams of chemical composition per unit did not change.

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AFSL TO TEST SMOKELESS CANDLE FOUNTAINS AFTER PROHIBITED CHEMICALS CHECK

AFSL has notified industry members that it will test and certify a fireworks device known as "Smokeless Candle Fountains" which appears to have gained popularity during the past year. The devices are manufactured under several different brand names and model numbers and are being marketed as "Smokeless Fountains" suitable for use in indoor celebrations, such as on birthday cakes, etc.

Sample of Smokeless Fountain with Spike

However, CPSC has notified AFSL that the items must not be labeled for indoor use and should not be used indoors due to safety concerns.

The AFSL Standards Committee evaluated the candles to determine if they should be classified as fireworks and certified for U.S. importers. After reviewing several models, the Committee was notified by CPSC that a chemical analysis of two different models had revealed the presence of a prohibited chemical in each of the two models (magnesium and zirconium). As a result, CPSC decided to classify them as fireworks devices subject to the CPSC regulations. They are classified as either Spike Fountains (for those that include a spike) or Hand-held Fountains (for those without a spike). CPSC is continuing to check incoming shipments of the Smokeless Candle Fountains for the presence of prohibited chemicals.

AFSL also asked DOT for guidance on how the devices should be classified and whether EX numbers are issued for the Fountain Candles. DOT responded that EX numbers currently are not being issued because the devices are not included in the APA Standard APA 87-1. DOT further stated that an applicant would need to identify that the device meets a category of devices in the APA Standard, and is manufactured in accordance with the applicable requirements of the Standard in order to submit an application under the APA Standard. If the device does not meet the APA Standard 87-1, the applicant will need to submit the application in accordance with 49 CFR §173.56(b).

Multi-Pack of Smokeless Fountains

COMPONENTS

(Continued from page 1, column 3)

other packaging and ready for assembly with launch tubes into a retail package.

Reloadable Tube Aerial Shell Tubes. Reloadable Tube Aerial Shell Tubes are a launcher tube shipped in bulk packages that are designed to be used in conjunction with reloadable tube aerial shells.

Missile Components. Missile Components consist of the motor tube with fuse inserted, designed to be assembled into a finished missile by the attachment of nose cone and/or bases to the tube. The component tube may or may not have finished artwork, graphics, and cautionary labeling affixed.

Certification of Component Lots will be identical to all certification procedures under the QIP. AFSL high-security stickers will be applied to each carton within a certified Lot, and the serial numbers on the stickers will be identifiable by the addition of the letter "C" before the numeric.

Administrative / Operational Procedures.

All administrative and operational procedures will be identical to those for the certification of regular merchandise, including applications for testing, assignment of Lot ID numbers, sample size and selection procedures, recording of test results, entry of data into the AFSL Testing Database, with the following exceptions:

Test Reports for the components will be the same as those used for finished products, except that the technician will hand-write "Component" at the top of the test report. A separate product category for components is included in the AFSL Database to allow for tracking of all testing for components.

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DOMESTIC PROGRAM

(Continued from page 1)

certified under this program.

Finished Fireworks Manufactured from Components Tested in China. Under this program, companies importing unfinished components that are previously certified in China may apply for testing and final certification of the finished items once final manufacturing is completed. The importer/manufacturer submits an application for testing to the SGS Tulsa lab. A Sample Collection Team is dispatched to the importer's/manufacturer's warehouse to collect a random sample from the completed Lot, and the sample is shipped to the Tulsa lab for testing. Those tests performed on the unfinished component in China will not be duplicated in the domestic program. Assuming a complying test result, stickers are then provided to the importer/manufacturer for application to shipping cartons of the finished product.

Finished Fireworks Fully Manufactured in the U.S. While there appears to be very little full manufacturing of fireworks in the U.S., AFSL is offering testing under the domestic program to cover those items as well. Similar to the program for components above, a random sample of the finished devices is collected by the Sample Collection Team and forwarded to the Tulsa lab for a complete test. Once testing is completed, the finished Lot will be certified by the application of the AFSL security sticker to each shipping carton within the manufacturing Lot. Sticker applications will be carried out by AFSL in this instance.

Full details regarding the program, including costs associated with each type of service, are available on the AFSL website, *www.afsl.org*. Click on the link to Domestic Program.

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CANDLE FOUNTAINS

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APA advised AFSL that the Candle Fountains will be included in the current revision to 87-1 that is being submitted to DOT. However, it is clear that some EX numbers have been issued in the past.

Given CPSC's classification of the fountains as fireworks devices, AFSL will test and certify the fountains for members so that Certificates of Compliance may be filed with CPSC. However, AFSL also has advised members in China that a valid EX number must be presented at the time of application for testing. In addition, AFSL is requiring that companies wishing to have the candles tested must first obtain a chemical analysis from a competent third party testing lab to document that the devices do not contain prohibited chemicals.

Once these criteria (EX numbers and chemical analysis) are met, AFSL will test the devices under the AFSL Standard for Fountains and apply the requirement for either Spike Fountains or Hand-held Fountains. The cautionary labeling required by AFSL matches the labeling for Spike or Hand-held Fountains, including the statement ***"FOR OUTDOOR USE ONLY".***

Upcoming Events

August 15-17, 2011 — Annual Technician Training Seminar, Liu Yang, China.

August 18, 2011 — Display Seminar in Liuyang, Hunan, China.

August 19, 2011 — Consumer Seminar in Liuyang, Hunan, China.

September 6 through September 10, 2011 attending NFA Expo 2011, Stevens Point, WI.

September 12, 2011 — AFSL Board Meeting, Seattle, WA.

September 14, 2011 — AFSL General Membership Meeting, Seattle, WA.

JERRY BOSTOCKY AWARDED CERTIFICATE OF APPRECIATION FOR 20 YEARS SERVICE ON BOARD

Jerry Bostocky, Vice President of Sales for B.J. Alan Company was presented with a Certificate of Service award for having served 20 years on the AFSL Board of Directors. The award was presented at the AFSL General Membership Meeting on September 22, 2010, in Savannah, GA.

Jerry Bostocky, B.J. Alan Co, flanked by Executive Director John Rogers and President Alan Zoldan, receives 20 Years Service Award at AFSL General Meeting.

Jerry joined the Board in March 1989 when AFSL was initially incorporated. He also was actively involved in the preliminary work which led to the establishment of AFSL as a separate entity.

In 1988, Jerry traveled to China with the group of industry representatives that included Joel Anderson, Chi-Kay Cheung, Alan Zoldan, John Conkling, and John Rogers, representing the Consumer Product Safety Commission. This group, dubbed "The Shekou Six" spent ten days in Shekou, Shenzhen, China meeting with numerous factories to review their consumer fireworks and advise them of modifications needed to comply with CPSC regulations. This meeting is widely viewed by the industry as the birth of AFSL.

When AFSL was organized formally in 1989, Jerry was named to the first Board and was re-elected for 6 consecutive terms. He served as President from 1996 to 1998. Throughout his tenure on the Board, Jerry took a leadership role, regularly traveling to China to assist in the implementation of the testing and certification program. He was a constant champion of keeping open communication with the industry to assure that AFSL represented all segments of the fireworks industry. He fought to provide funding for the National Council on Fireworks Safety, and often served as an effective public spokesman on the value of AFSL to the fireworks industry.

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NEW HIGH - SECURITY STICKERS NOW IN USE

AFSL is using a new, high security sticker to identify shipments of fireworks tested and certified in China and in the U.S. The stickers contain enhanced security features that prevent duplication and allow for quick identification of fraudulent stickers.

The stickers are designed and manufactured by SICPA, the

world's leading security ink producer, which manufactures the inks used in 90% of the world's currencies, including US currency. AFSL contracted with SICPA to begin providing the stickers in January 2010. Critical features of the stickers include a color shift feature in the ink, special paper that prevents the stickers from being removed once applied to a shipping carton, special UV visible identifiers, and a SICPA Smart Tracking feature that allows the company to identify each sticker with an electronic beeper.

SICPA also has provided to AFSL special filters that allow easy authentication of the stickers. These filters are being used by CPSC to validate AFSL stickers on shipments of fireworks arriving at U.S. Ports. Because the stickers are sequentially numbered, AFSL can track each sticker back to the original test performed in China.

The upgraded stickers are being used in combination with a high security ink stamp bearing the AFSL Lot ID number to mark each carton of fireworks in a tested Lot.

AFSL WELCOMES THE FOLLOWING NEW MEMBERS:

(July 2010 – May 2011)

IMPORTER PARTICIPANTS

1. American Packaging LLC, Kansas City, MO
2. Big Ocean Trading Inc., Seattle, WA
3. Boom Town Fireworks, Inc., Dyer, IN
4. Coach's Fireworks LLC, Magnolia, TX
5. Fireworks Factory, Fayetteville, TN
6. Freedom First Fireworks, Chuckey, TN
7. Hamco Fireworks LLC, Wayne, OK
8. Heartland Associates, Columbia, PA
9. J & D Group, EL Monte, CA
10. Micronesia Holding Co., LLC, Saipan, MP
11. Mytime Inc., Walden, NY
12. Ninja Fireworks Company, LLC, Henderson, NV
13. Pyrotecnic Suppliers, LLC, Henderson, NV
14. The Rozzi Company, Inc. dba Rozzi, Inc., Love Land, OH
15. Sanedsam Inc., Old Orchard Beach, ME
16. U.S.T.L. Import & Export, Inc., Monterey Park, CA
17. Warpath Corp, Plammer, ID
18. Xtreme Fireworks, Inc., Morse Mill, MO

SHIPPER PARTICIPANTS

1. C & L Int'l Industrial Co., Ltd.
2. Changsha Year Import & Export Co., Ltd.
3. Huasheng Fireworks Manufacture & Display Co., Ltd.
4. Jiangxi Changshan Exporting Fireworks Manufacture Co., Ltd.
5. Liuyang Jinkou Rising Import & Export Trading Co., Ltd.
6. Shaodong County Tengda Fireworks Co., Ltd.
7. Wanzai Century Import & Export Co., Ltd.

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