

**AFSL CONSUMER FIREWORKS
INDUSTRY SEMINAR
LIUYANG, CHINA
November 14, 2019**




AGENDA FOR MEETING

- I. Introduction.
- II. Board of Directors Election Results.
- III. Report on Consumer Fireworks Testing Program.
- IV. Update on CPSC Proposed Rulemaking.
- V. Modifications to AFSL Standards.
- VI. Modifications to US Domestic Audit .
- VII. BV Update to AFSL Testing Program.
- VIII. Other Issues
- VIII. Closing Remarks.



I. Introduction



II. Election of Directors

Election Results

a. Consumer Importer/Distributor/Retailer Category:

Michael Collar – Winco Fireworks International

b. Consumer Shipper Category:

Thomas Chan – United Pyrotechnics (USA), Inc.

c. Display Importer Category:

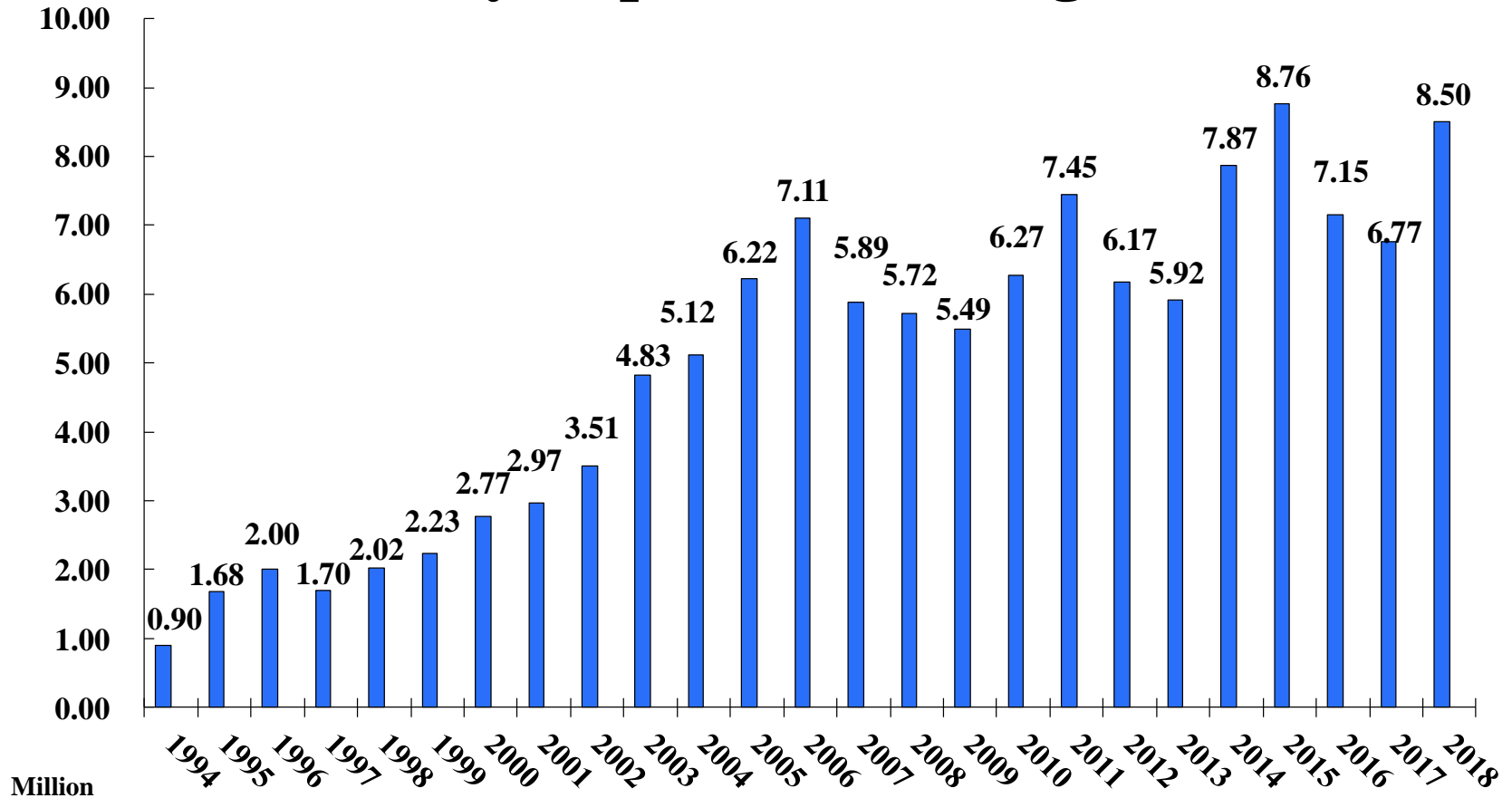
Phil Grucci – Fireworks by Grucci



III. Report on Fireworks Testing Program

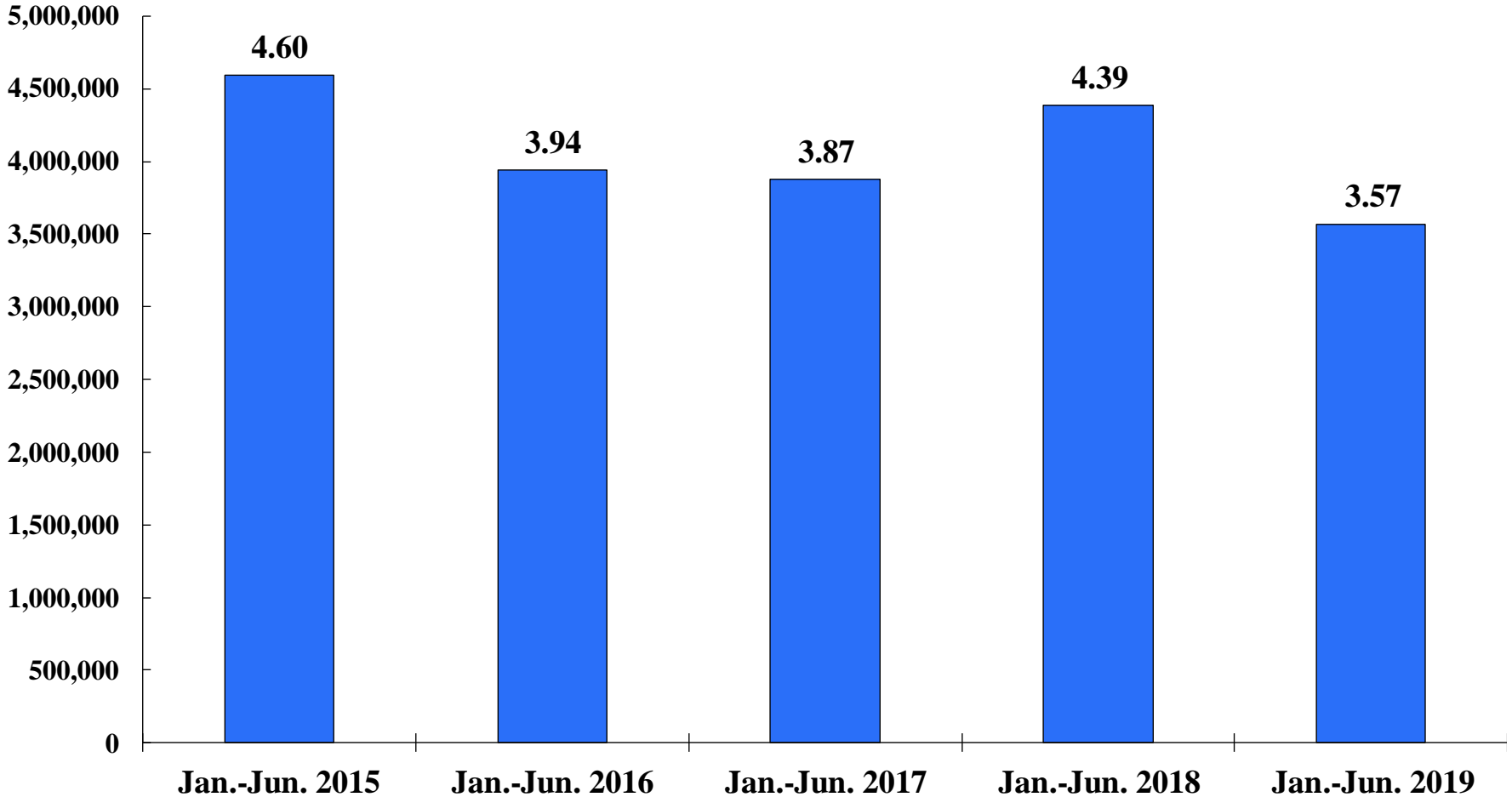
CASES TESTED BY YEAR 1994-2018

Quality Improvement Program



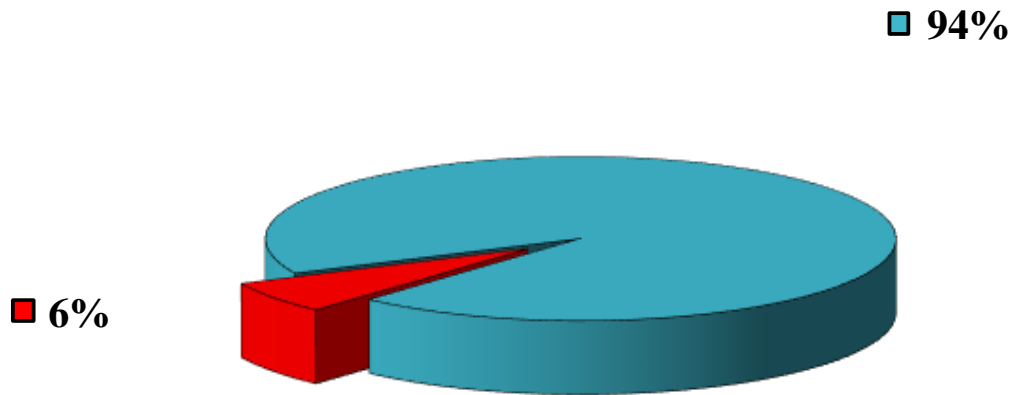
CASES TESTED BY YEAR 2015-2019

Jan. – Jun.



COMPLIANCE RATE QUALITY IMPROVEMENT PROGRAM HALF YEAR 2019

■ Compliance
■ Non-Compliance



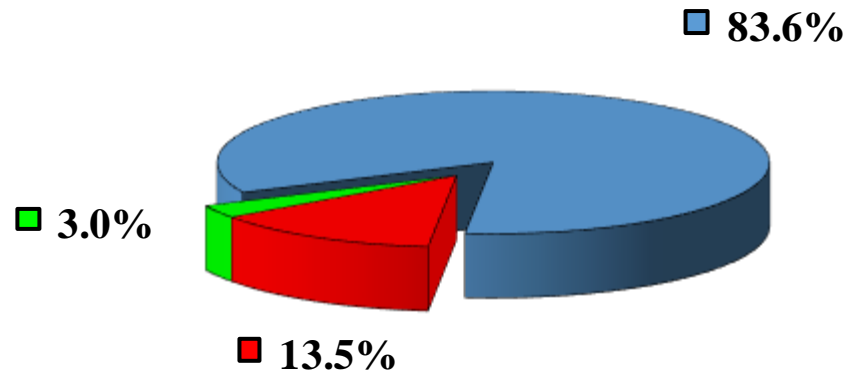
Complying Cases: 3.34 million (include 104,579 component cases).

Non-Complying Cases: 227,900 (include 744 component cases).

Total Cases: 3.57 million cases.

REGULAR, ASSORTMENT, AND COMPONENT HALF YEAR 2019

■ Regular ■ Assortment ■ Component



Cases tested for Regular Program: 2.98 million cases.

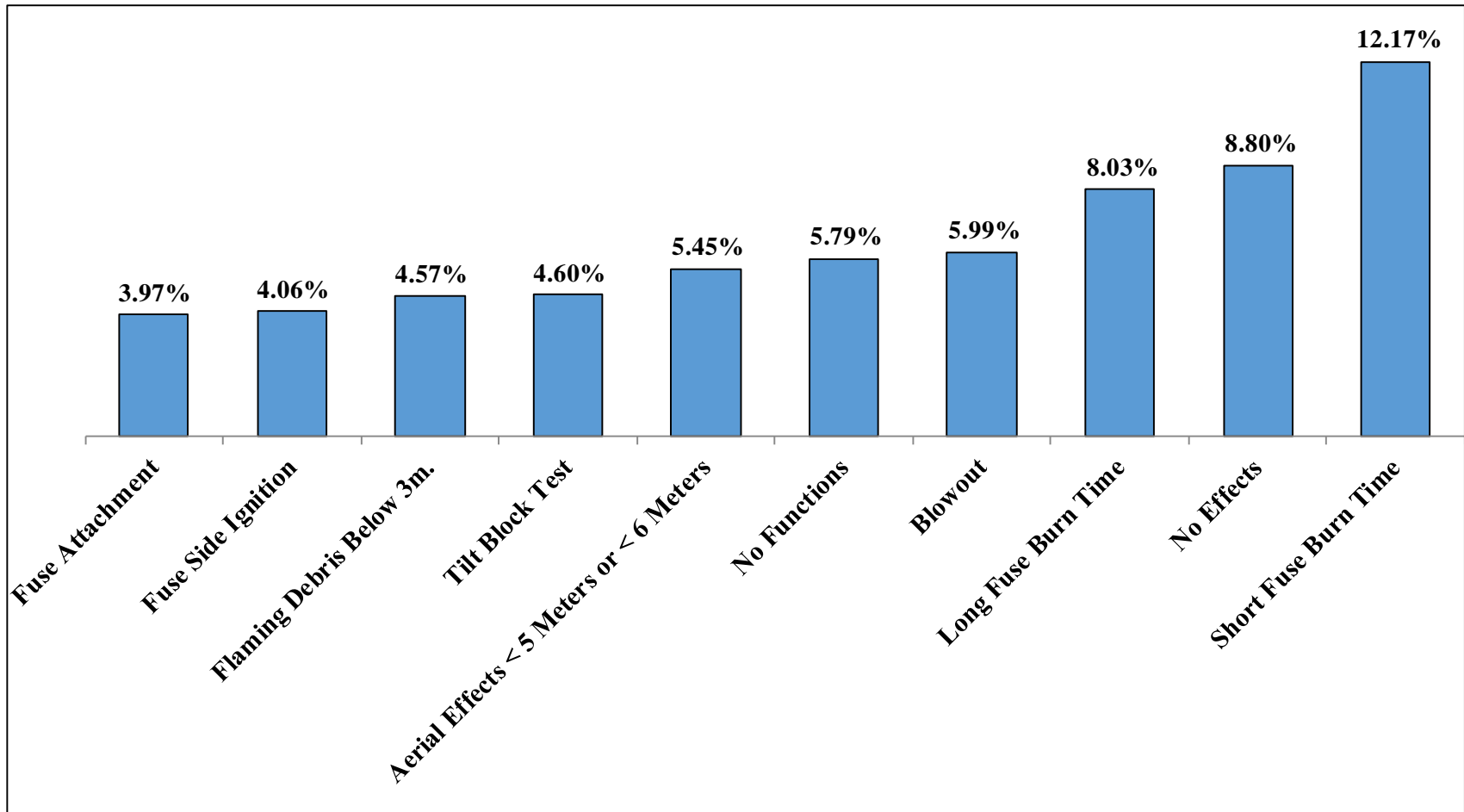
Cases tested for Assortment Program: 480,567 cases.

Cases tested for Component Program: 105,323 cases.

Total Cases: 3,569,457

TOP 10 VIOLATIONS HALF YEAR 2019

Percentage of Total Violations





IV. Update on CPSC Proposed Rulemaking

ACTIONS PROPOSED BY CPSC

1. Metal Composition in Break Charges

- CPSC proposal (new 16 CFR § 1500.17(a)(3)(i), declares as a “banned hazardous substance”:

“Fireworks devices that contain a burst charge containing metallic powder less than 100 mesh in particle size . . . If the burst charge is produced by a charge of more than 2 grains (~130 mg) of pyrotechnic composition.”

Proposed Modifications

- Adopt AFSL/APA ban on fine mesh metals in aerial break charges (with one percent discretionary allowance for contamination);
 - Adopt AFSL/APA total composition limits and break charge-to-overall composition ratio limits for aerial devices, specifically: Limits sky and bottle rockets to 20 g of comp.;
 - Limit mine and shell devices to 60 g of comp. per tube; 20 g of lift charge (for each tube); 200 g/500 g total comp.; break charge may not exceed 25% of total comp., exclusive of lift charge;

Proposed Modifications (continued)

- Reloadables limited to 60 g of comp. per shell; 20 g of lift charge per shell; 400 g total comp. per kit and break charge limit of 25% of total comp. exclusive of lift charge;
 - Lift charges limited to black powder.
-
- Clarify limit on firecrackers to 50 mg of comp. (except for firecrackers used as a component of a rocket);

Proposed Modifications (continued)

- Adopt AFSL/APA requirement that bases remain “securely attached during handling, storage and normal operation;”
- Clarify prohibition on “burnouts” and “blowouts;” and
- Define various terms (banned “aerial bomb,” burst charge,” etc.).

CPSC Final Decision

- On September 24, 2019, CPSC voted **NOT** to adopt the proposed modifications to the CPSC regulations.
- The vote was 3 to 1 with 1 abstention.
- The vote went against the CPSC staff's recommendation which strongly supported adoption of the changes.

Impact of CPSC Decision

- CPSC and AFSL will continue to enforce the audible effects test (“ear test”).
- The pyrotechnic composition limits for individual devices remain in effect in the APA87-1 and the AFSL standards.
- AFSL will continue to work with CPSC and DOT to enforce all existing CPSC, DOT and AFSL standards.
- The fine mesh metal powder restriction in the AFSL standards and APA 87-1 remain in effect.



Fireworks-Related Fatalities Report

2019 Fireworks-Related Fatalities

During the 2019 Fourth of July fireworks season, we received reports of eighteen fatalities reportedly related to fireworks. This is the highest number of fatalities since AFSL has been investigating these events. Following is a summary of the eighteen fatalities that occurred.

SUMMARY

Of the eighteen fatalities:

- Thirteen involved consumer fireworks:
- Three involved three inch display shells:
- Two involved homemade/illegal fireworks:
- Of the consumer fireworks, eleven involved reloadable tube aerial shells and one was a roman candle.

Of these fatalities the products included:

- Six were reloadable tube aerial shells size unknown
- Two were reloadable tube aerial shells five inches in length
- Two were reloadable tube aerial shells four inches in length
- One was a ball shaped reloadable tube aerial shells
- One was a roman candle
- One was multiple consumer fireworks (Show)



Of the thirteen fatalities types of injuries included:

- Seven were blunt force trauma to the chest
- Three were blunt force trauma to the head
- One was blunt force trauma to the head and chest
- One was burns to her lungs
- One was other (Head Injury)



V. Modifications to AFSL Standards

Standard for Reloadable Tube Aerial Shell Devices

- In order to maintain consistency with APA 87-1A, Section 2-1.11.4 of the AFSL Standard for Reloadable Tube Aerial Shell Devices was eliminated from the Standard, thereby removing the requirement that canister shells must not exceed 4 inches in length.

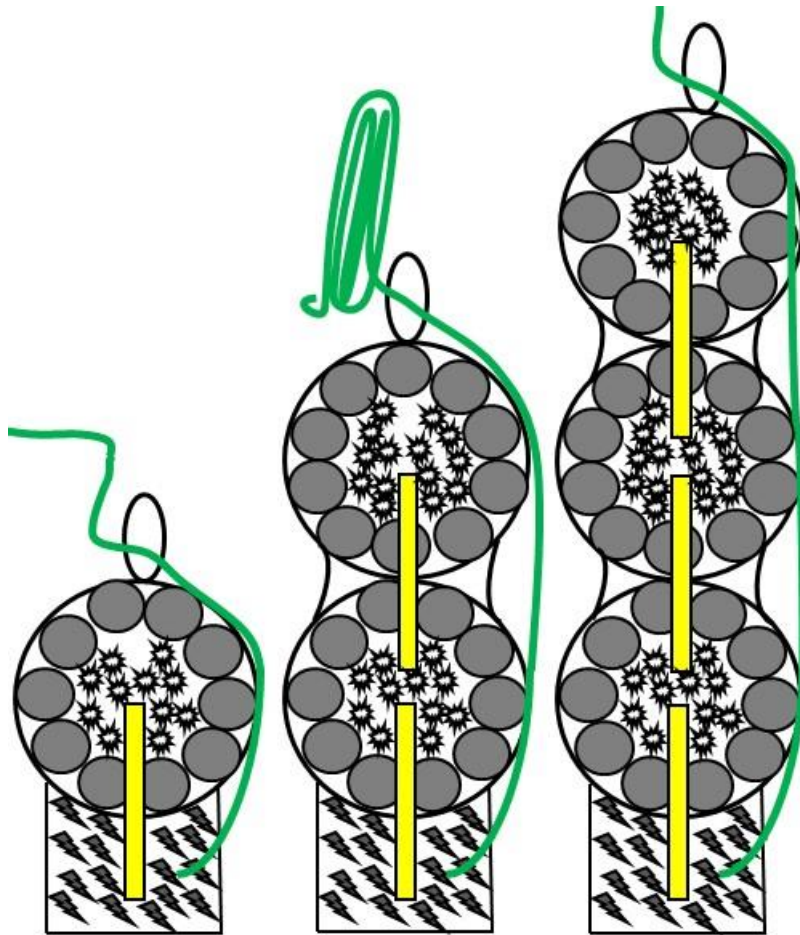
Effective Date: February 25, 2019.

Standard for Reloadable Tube Aerial Shell Devices

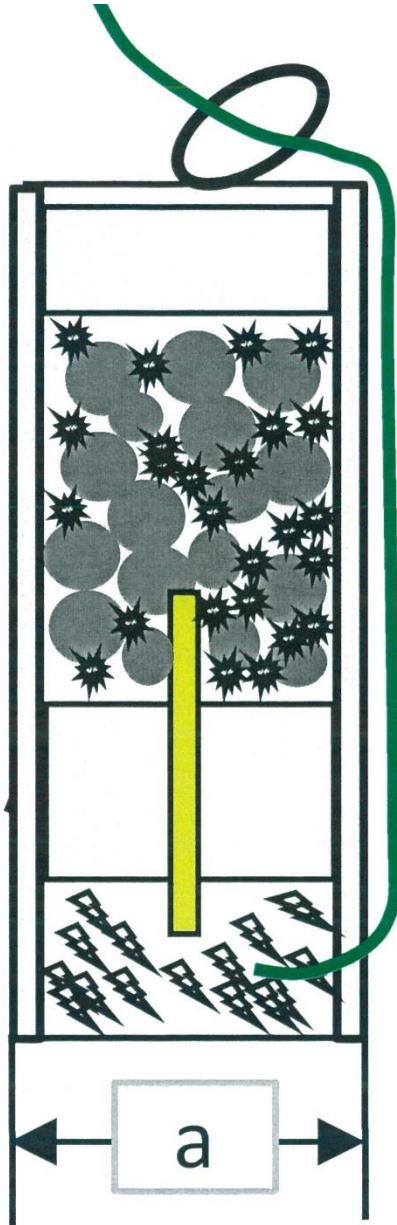
- Eliminate the tube abuse test for all spherical-shaped reloadable tube aerial shell devices, and canister shells that do not exceed one inch in diameter.

Exempt from the tube abuse test are the following devices:

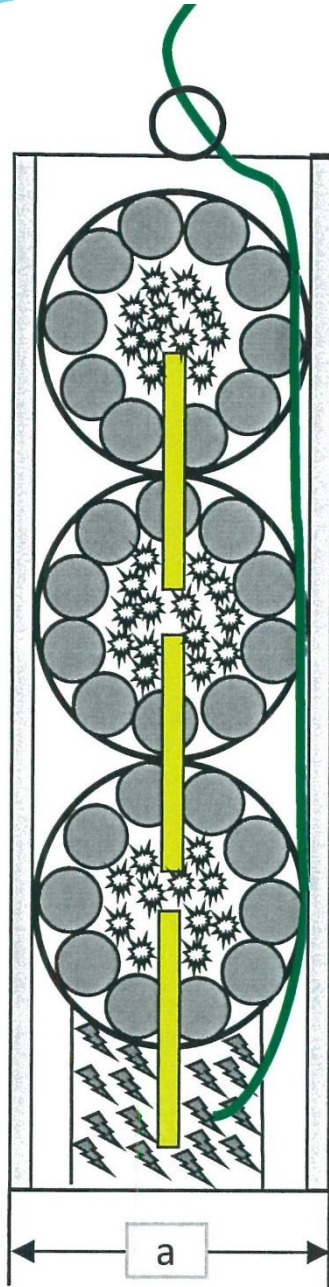
- a. Single-break spherical-shaped shells.
 - b. Spherical-shaped shells containing multiple breaks.
 - c. Canister-shaped shells that are one-inch or less in diameter.
- Effective date: November 15, 2019



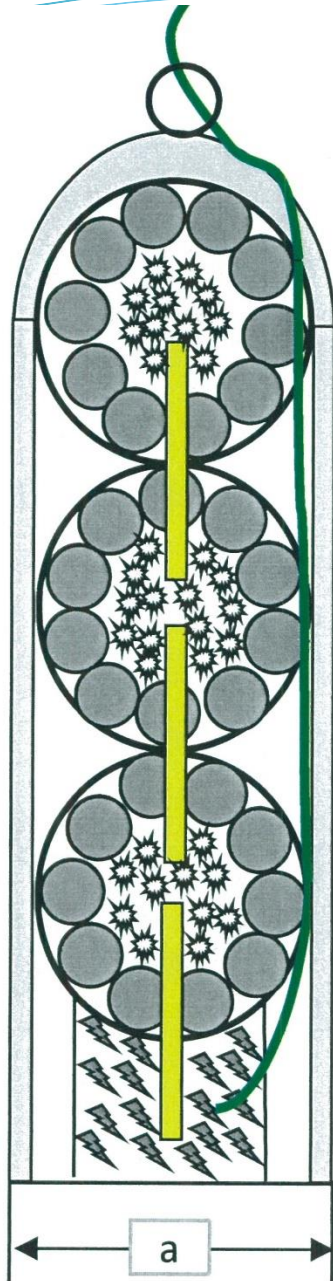
- All spherical-shaped shells.
- Exempt



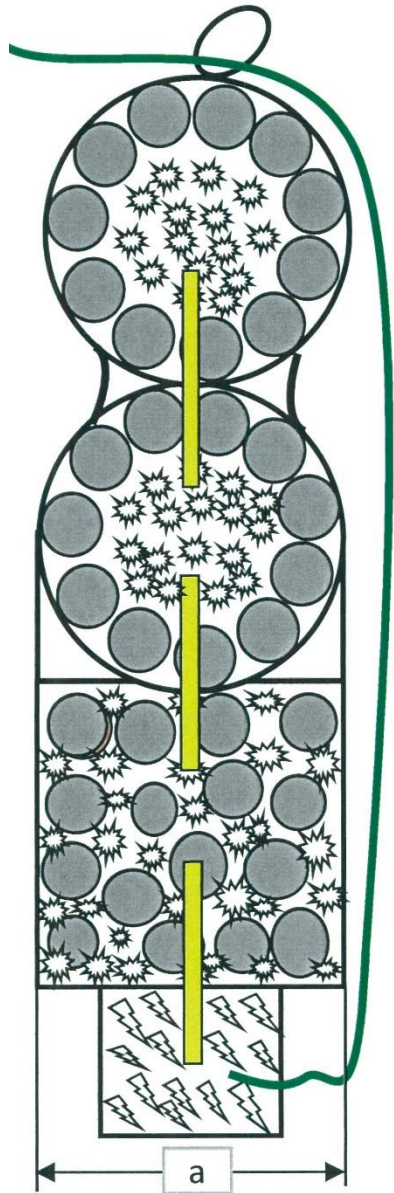
- Canister-shaped shells.
- Exempt
if “a” \leq 1 inch



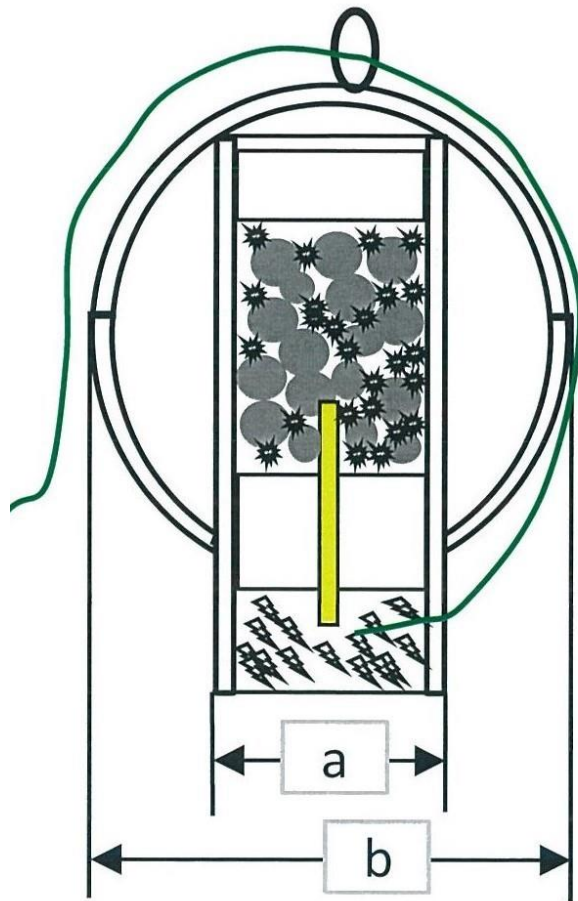
- Canister case with spherical-shaped shell inside.
- Exempt if “a” \leq 1 inch



- Canister-shaped shell with nose cone.
- Exempt if “a” \leq 1 inch



- Combination of canister and spherical shells.
- Exempt
if “a” \leq 1 inch



- Canister shell with a spherical case on top.
- Exempt if “a” \leq 1 inch

- 
- VI. Modifications to US Domestic Audit Program

AFSL Domestic Audit Program

- Eliminate routine audits of AFSL importers' warehouses.
- Future audits or visits will be for the following:
 - Review or re-test products requested by a member.
 - On-site interviews of new members.
 - Re-audit a suspended member for reinstatement.

- 
- VII. BV Updates to AFSL Testing Program



**BUREAU
VERITAS**

AFSL Consumer Fireworks Industry Seminar

September 26, 2019

- For the last couple of years our teams have tested an average of 9 – 10 lots per day
- Using product mix and AFSL test time data for the last year shows average of 7.5 lots per day per team is more realistic
- Based on volume in our busiest month (January 2019) we needed 40 technicians to meet the demand
- We have used floaters to supplement trained technicians during peak periods but they could only perform limited work at the direction of the technician

■ Current Level

- 23 (Senior Certified Technician + Certified Technician) Permanent Staff
- 2 Technicians Permanent Staff
- 6 Assistant Technicians Permanent Staff
- 8 Seasonal Staff

■ Recruitment

- 1 Additional Permanent Staff by 11/30/2019

- Liuyang work will be their priority during peak periods
- Liuyang work performance will be included in their annual evaluation
- Participation in Annual Training in 2020 and beyond
- Onboarding
 - One Week Classroom Training based on 2019 Annual Training
 - Two Weeks Field Training by SCT
 - One Month Paired with SCT for Product Testing
 - Increased Frequency On-Site Observation



VIII. Other Issues



VIII. Closing Remarks

www.afsl.org

THANK YOU!

