AFSL CONSUMER FIREWORKS SEMINAR

Wichita, KS September 12, 2018



AGENDA FOR MEETING

- I. Introduction John D. Rogers, Executive Director
- II. Update on CPSC Proposed Rulemaking
 - John Rogers, AFSL, Chuck Rogers, BV
- III. Consumer Fireworks Mid-Year Program Summary
 - John D. Rogers, Exec. Director
- IV. Election of Directors

BREAK

- V. Domestic Audit Program—Jerry Wingard, Auditor
- VI. Questions/Answers

I. Introduction

- John D. Rogers, Executive Director

II. Update on CPSC Proposed Rulemaking

John D. RogersChuck Rogers

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."

1. Metal Composition in Break Charges.

Note:

- -Drops all reference to "intended to produce audible effect"
- -1 percent proposed "contamination" allowance of fine mesh metals
- -Other "prohibited chemicals" will still apply
- -CPSC will use x-ray fluorescence (XRF) to screen and ICP (wet chemistry) for final product evaluation

Accompanied by indication that the agency will exercise "compliance discretion" to allow up to 1 percent, by weight, of fine mesh metal "contaminants" in burst charges).

CPSC Proposed Rulemaking - Timeline

- NPR published February 2, 2017
- Initial Comments Due April 18, 2017
- NFA requested and received extension for 3 months
- Final Comments Due July 17, 2017
- AFSL/APA submitted joint comments July 17, 2017
- Commission expects to make receive Staff recommendation by September 30.
- Final Commission decision possibly mid-October 2018

AFSL/APA Comments

- AFSL/APA strongly support the provision prohibiting fine mesh metal powders in aerial break charges.
 - It will enhance the safety of aerial devices by reducing the risk of catastrophic injuries from malfunctions and misuse;
 - The proposal would eliminate the "ear test" and minimize the risk of products failing in the US that have been certified by AFSL;
 - The proposal will make the CPSC requirements consistent with existing DOT requirements.

AFSL/APA Comments, cont.

- AFSL/APA strongly recommend a formal, regulatory contamination allowance of <u>two percent</u> fine mesh metal powder, in addition to formal allowance for instrument testing variability.
 - This reflects the realities of the fireworks manufacturing process;
 - represents a level at which both industry and CPSC testing data have proven not to pose any significant additional hazard to consumers.

WHY 2 PERCENT?

- 1. The percentage of items currently in the market that will comply with two percent is very high (81% for Mine and Shell Devices and 84% for Reloadables).
- 2. A contamination level higher than 2% would require AFSL to conduct wet chemistry testing at a cost to the importer. Less that 2% can be tested with XRF Scanning at no additional cost.

AFSL/APA Comments, cont.

- AFSL/APA strongly support adoption by the CPSC of existing composition limits and ratios contained in the 87-1/DOT requirements.
 - Such limits are necessary and reasonable to help enhance the safety and enjoyment of these consumer fireworks;
 - They would impose a minimal compliance burden since they are already mandated by the Department of Transportation and are currently tested and certified to by the large majority of U.S. fireworks importers.

AFSL/APA Comments, cont.

- AFSL/APA strongly support the adoption of the other regulatory provisions proposed by CPSC, including Tilt block test, fuse side ignition test, etc.
 - doing so will help establish an even regulatory playing field for the entire U.S. fireworks industry;
 - These provisions have been in place in both APA 87-1 and the AFSL Standards and have been certified to by AFSL for the past 20 years. Should not result in any additional burden or cost to industry.

Summary of AFSL Testing

Chuck Rogers

Americas Director – Supply Chain Solutions and Technical Consulting

Bureau Veritas Consumer Product Services

Summary of AFSL Blind XRF Scanner Tests

- 1107 in 2016, 616 in 2017.
- From both Reloadable Tube Aerial Shell Devices and Mine and Shell Devices.
- Samples were selected from normal AFSL testing lots.
- Break charges were removed from products without identifying the product name.
- Samples were numbered, secured and sent to BV office for analysis.

Summary of AFSL Member Requested Tests

- 79 Samples in 2017.
- From both Reloadable Tube Aerial Shell Devices and Mine and Shell Devices.

Testing Procedure

• Test was conducted under the supervision of BV chemical expert and representative from the scanner manufacturer.

• The scanner model is identical to the one which CPSC is using.

• Test procedure followed were identical to those recommended by CPSC.

Summary of Test Results

- Mine and Shell Devices
 - 2016 75% with 2% or Less Fine Mesh Metal
 - 2017 94% with 2% or Less Fine Mesh Metal
- Reloadable Tube Aerial Shell Devices
 - 2016 87% with 2% or Less Fine Mesh Metal
 - 2017 80% with 2% or Less Fine Mesh Metal
- AFSL Member Samples (MSDV and RTAS)
 - 94% with 2% or Less Fine Mesh Metals

AFSL Program XRF Test Process

 Dedicated XRF Scanner Teams will work in coordination with normal test teams

- Sufficient XRF Capacity to Meet Turnaround Time
- No additional cost to AFSL Members unless Wet Chemistry is requested

AFSL Program XRF Pilot

• Pilot will begin 9/17/2018

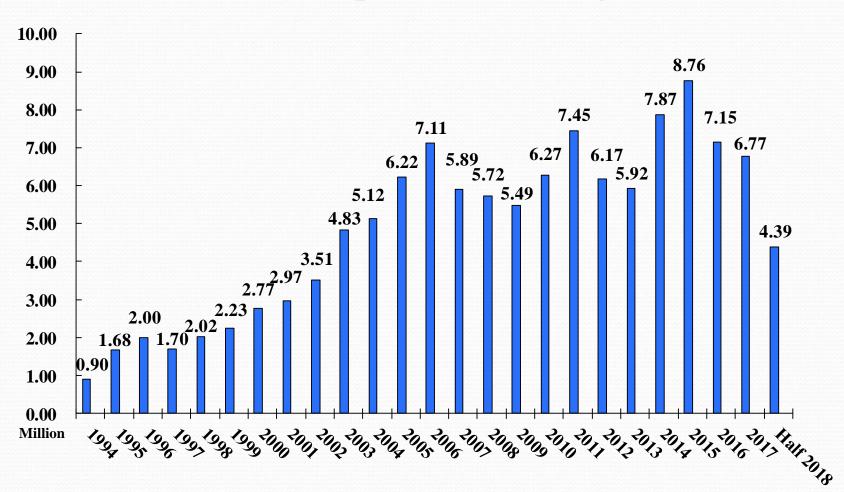
- Voluntary Program (4 Shippers To Date)
- Two XRF Teams One in Liuyang and One Floating to Other Areas

- XRF Results > 2% will be confirmed by wet chemistry
- Upon confirmation product >2% will fail

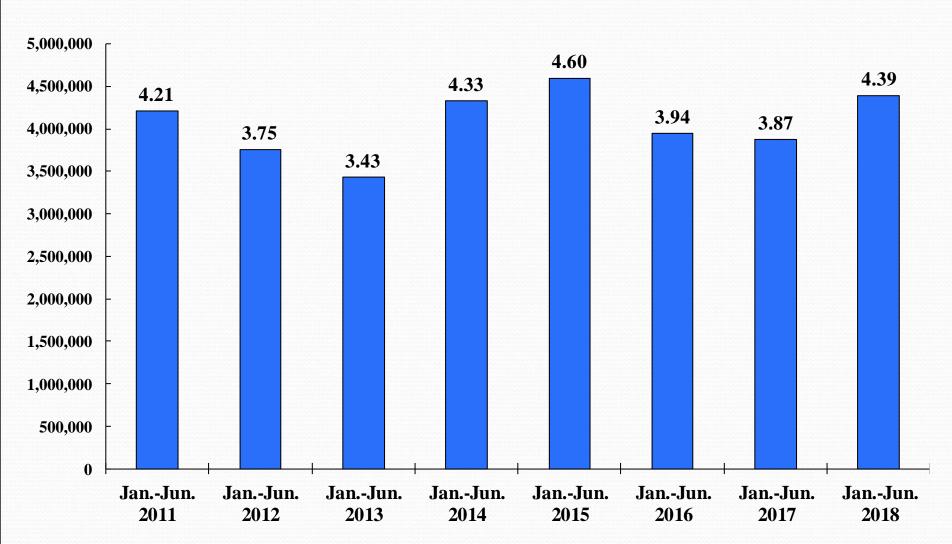
III. Consumer Fireworks Mid-year Program Summary

- John D. Rogers, Executive Director

CASES TESTED BY YEAR 1994-Half 2018 Quality Improvement Program



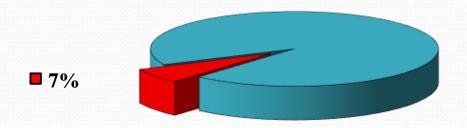
CASES TESTED BY YEAR 2011 - 2018 Jan. – Jun.



COMPLIANCE RATE QUALITY IMPROVEMENT PROGRAM HALF YEAR 2018

- **■** Compliance
- **■** Non-Compliance

93%



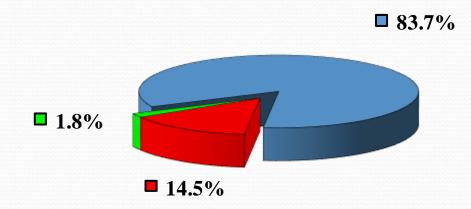
Complying Cases: 4.10 million (include 79,589 component cases).

Non-Complying Cases: 287,576 (include 500 component cases).

Total Cases: 4.39 million cases.

REGULAR, ASSORTMENT, AND COMPONENT HALF YEAR 2018

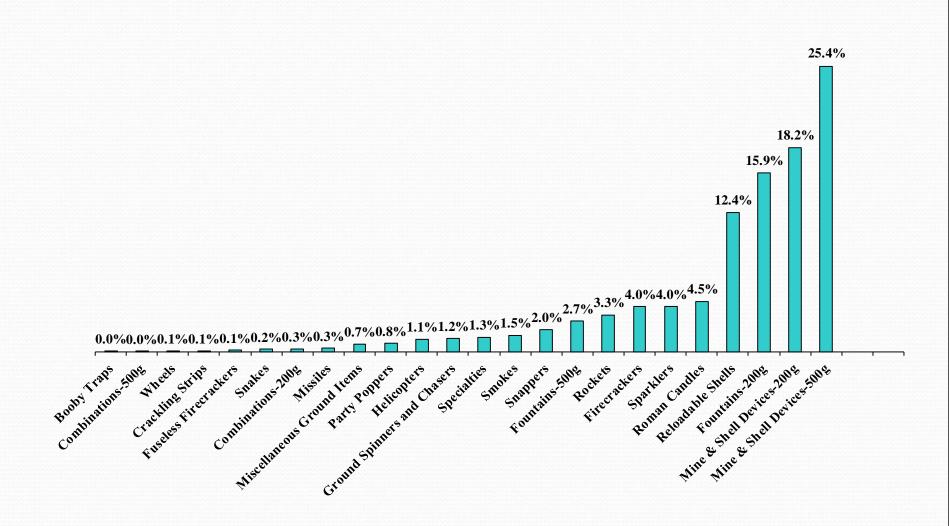
■ Regular ■ Assortment ■ Component



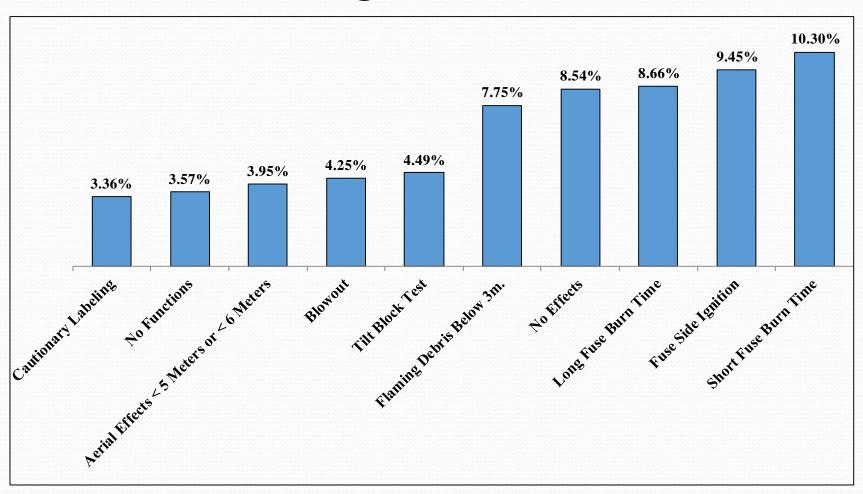
Cases tested for Regular Program: 3.67 million cases. Cases tested for Assortment Program: 634,179 cases. Cases tested for Component Program: 80,089 cases.

Total Cases: 4,386,413

PERCENTAGE TESTING BY PRODUCT CATEGORY HALF YEAR 2018



TOP 10 VIOLATIONS HALF YEAR 2018 Percentage of Total Violations



IV. Election of Directors

Election Candidates

a. Consumer Importer/Distributor/Retailer Category:

Vince Bellino – Bellino Fireworks Inc.

Michael Ingram – Fireworks Over America

Daryl Marmon - Wald and Company, Inc.

b. Consumer Shipper Category:

John Mo – Brothers Pyrotechnics, Inc.

BREAK

V. Domestic Audit Program for U.S. Importers

- Jerry Wingard, Project Manager

Domestic Audits Phase III

• Phase III started on March 12, 2015 with follow-up audits of companies that were not fully in compliance in Phase I and II.

A total of 51 companies have been re-audited:

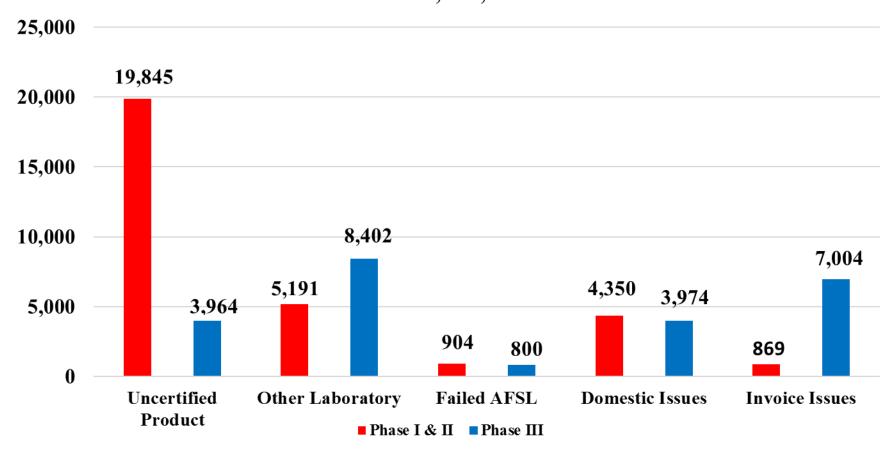
- > 23 Companies had improved with no violations.
- > 28 Companies remained the same and still have violations.

Issues found:

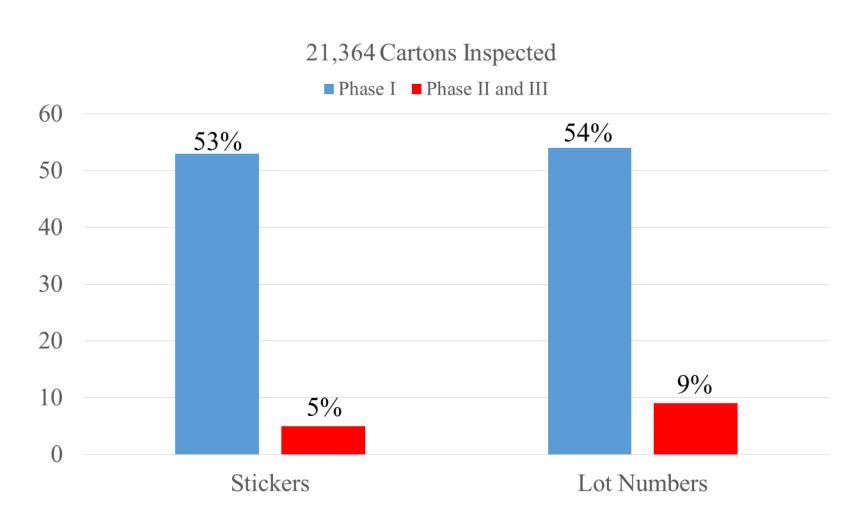
- Domestic issues
- Invoices
- Un-certified items
- Items tested by other labs
- Items that had failed AFSL testing

Comparing Issues From Phase II and III

Phase I & II: 1,421,979 cartons Phase III: 1,863,704 cartons



AFSL Certification Process Findings Phase I, II and III



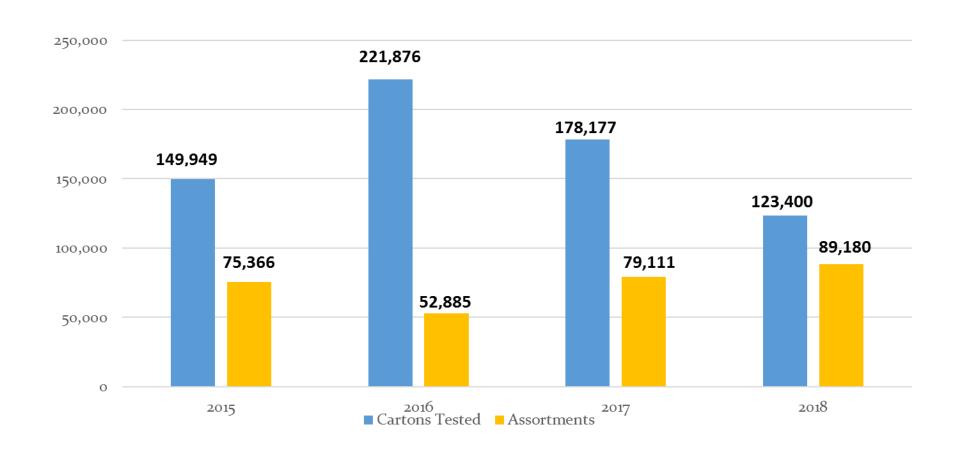
Corrective Actions for Shippers

- During the February 2017 meeting, the Board approved corrective actions for shippers that had continuing violations from Phase I and II audits.
 - Eleven shippers have received Pending Suspension Letters requesting corrective action plans.
 - Seven Shippers have received Notices of Violation of the AFSL Shippers' Agreement.

Internet Observation

- During the past fireworks season AFSL Member web sites were reviewed as directed by the AFSL Board for compliance with their Importers Agreement. We attempted to review all 156 Members.
- ➤ Eleven Companies had product shown that was not allowed under AFSL Standards.
- ➤ One company had product advertised from a Supplier that is not a AFSL Member Shipper.
- AFSL contacted all Importers and advised them of the issues observed.

NUMBER OF CARTONS TESTED AND ASSORTMENTS CERTIFIED THRU THE DOMESTIC TESTING PROGRAM



Accident Investigations in 2018

In 2018 we investigated 49 incidents related to fireworks.

Four incidents were fatalities, forty-two were injuries (twenty-seven involved hands and fingers, four involved face and eyes and four were unknown), and seven involved property damage.

Four fatalities involved the following products:

- Three involved Reloadable Tube Aerial Shell Device
- One involved a 3" Display Shell

VI. Questions & Answers

www.afsl.org

THANK YOU!

