



U.S. Department
of Transportation
**Pipeline and
Hazardous Materials
Safety Administration**



FIREWORKS CERTIFICATION PROCEDURES

*A Guide to Becoming a Fireworks Certification Agency (FCA) and the
Certification of UN0336, 1.4G Consumer Fireworks Through an FCA*



The contents of this guide do not have the force and effect of law and are not meant to bind the public in any way. This guide is intended only to provide information to the public regarding existing requirements under the Hazardous Materials Regulations.

TABLE OF CONTENTS

FIREWORKS CERTIFICATION PROCEDURES

Introduction.	04
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SECTION 01: FOR PROSPECTIVE FCAS

FCA Eligibility.	07
Application Requirements	07
After Applying	08

SECTION 02: FOR MANUFACTURERS, U.S. AGENTS, IMPORTERS AND CARRIERS

Application Process	10
Application Requirements	11
What if the FCA Denies a Manufacturers Application?	12
Difference Between FCA Certification and PHMSA Approval	12
Manufacturer's Record Keeping	13
Importers and Carries	14



INTRODUCTION

In July 2013, PHMSA established an exception for Division 1.4G consumer fireworks where manufacturers of UN 0336 Division 1.4G consumer fireworks have the option to submit their firework devices to a DOT-approved Firework Certification Agency (FCA) instead of applying directly to PHMSA. These fireworks must conform to the 2018 American Pyrotechnics Association (APA) Standard 87-1A and 49 CFR 173.65.

If a manufacturer, or U.S. agent of a foreign manufacturer, chooses to use an FCA, they must apply in writing to a DOT-approved FCA prior to transporting Division 1.4G consumer fireworks into or within the United States. The FCA reviews the application for completeness and determines whether the fireworks meet the 2018 APA Standard 87-1A and the requirements of 49 CFR 173.65.

Upon completion of the review, if approved, the FCA will assign a firework certification (FC) number and provide PHMSA with the FC number, with acknowledgment and notification of receipt provided by PHMSA (see 49 CFR 173.65). Finally, the FCA will notify the manufacturer in writing of the decision regarding the fireworks.

USING THIS BROCHURE

- Are you interested in becoming an FCA? Proceed to Section 1.
- Are you a fireworks manufacturer seeking device approval? Turn to Section 02.



SECTION 01

FOR PROSPECTIVE FCAs



APPLYING TO BECOME AN FCA

FCA ELIGIBILITY

To qualify to be an FCA, applicants **MUST** (49 CFR 107.402(d)(1)):

- Be a U.S. resident, or for a non-U.S. resident, have a designated U.S. agent representative as specified in 49 CFR 105.40.
- Employ personnel with work experience in manufacturing or testing of fireworks or explosives; or a combination of work experience in manufacturing or testing of fireworks or explosives and a degree in the physical sciences or engineering from an accredited university.
- Have the ability to review design drawings and applications to certify that they are in accordance with the 2018 APA Standard 87-1A and verify that the applicant has certified the thermal stability test procedures and results.
- Be independent of and not owned by any consumer fireworks manufacturer, distributor, import or export company, or proprietorship.

APPLICATION REQUIREMENTS

An FCA application **MUST** include (49 CFR 107.402(d)(2)):

- The name, address, and country of each facility where the Division 1.4G consumer fireworks applications are reviewed and certified.
- A detailed description of the qualifications of each individual the applicant proposes to employ to review and certify applications in accordance with the requirements set forth in 49 CFR part 173 and the 2018 APA Standard 87-1A.
- Written operating procedures for the FCA reviewing and certifying the applications in accordance with the requirements set forth in 49 CFR part 173 and the 2018 APA Standard 87-1A.
- The name, address, and principal business activity of each person having any direct or indirect interest in the applicant greater than three percent and any direct or indirect ownership interest in each subsidiary or division of the applicant.
- A statement that the applicant will perform its functions independent of the manufacturers, transporters, importers, and owners of the fireworks.

AFTER APPLYING

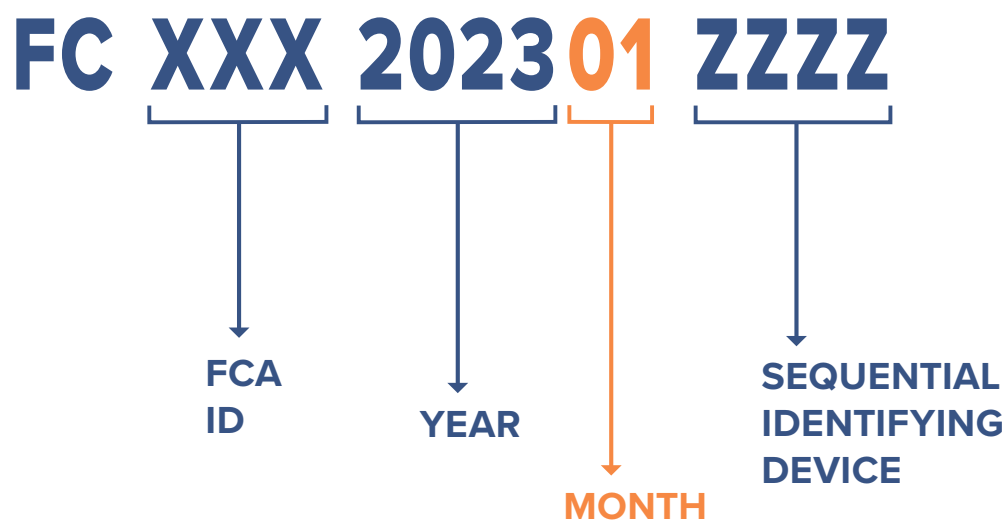
HOW WILL A PROSPECTIVE FCA KNOW THEIR APPLICATION WAS APPROVED?

AFTER A SUCCESSFUL REVIEW PHMSA WILL ISSUE THE FCA APPROVAL DOCUMENT.

The FCA approval documentation will include:

- The firework certification agency number (FCA#).
- Requirements surrounding the periodic renewal of an FCA.
- Details specifying how applicants submit applications and the method of transmitting FCA certifications to PHMSA.
- Instructions on the issuance of firework certifications, including a unique identifier sequence and tracking numbers.
- Record-keeping requirements specific to the FCA.
- Qualifications of each employee conducting FCA reviews.
- Procedures to notify PHMSA in the event of operational changes or modifications (e.g., reporting changes in employment status, hiring of new personnel, or changes to standard operating procedures).

The Firework Certification Agency number is the FCA's unique identifier and will appear at the start of the FC numbers issued to approved designs. The string will look very much like an EX number, but will begin with the FCA number instead of an "EX," as demonstrated below:



SECTION 02

**FOR MANUFACTURERS, U.S.
AGENTS, IMPORTERS AND
CARRIERS**



APPLYING TO AN FCA FOR A FIREWORKS CERTIFICATION

APPLICATION PROCESS

HOW DOES A MANUFACTURER APPLY FOR AN FCA CERTIFICATION?

If a manufacturer chooses to have its fireworks certified by an FCA rather than submitting an approval application to PHMSA, a manufacturer may submit its application directly to an FCA. In the case of a foreign manufacturer, a U.S. Agent may submit an application on behalf of the manufacturer.

Similar to the approval process, it is the responsibility of the manufacturer to prove that the fireworks being submitted for certification comply with the requirements in the 2018 APA Standard 87-1A and 49 CFR 173.65. A manufacturer would apply in writing to an FCA in the method detailed in 2018 APA Standard 87-1A, Appendix II, and the FCA would assign an FC number.



APPLICATION REQUIREMENTS

The 2018 APA Standard 87-1A, Appendix II defines the seven key elements of an application:

1. Identification of the applicant that includes the name, address, telephone, and fax numbers of the manufacturer.
2. A selection of the device category.
3. Description of the device including dimensions and chemical composition limits.
4. Chemical Formulation Sheet (list of all effects and chemicals used to produce the effects).
5. Diagram of device (with labels identifying the major components of the device).
6. Thermal Stability Test results.
7. Signed Certification with compliance of the 2018 APA Standard 87-1A.

WHAT IF THE FCA DENIES A MANUFACTURER'S APPLICATION?

NOTIFYING THE APPLICANT

If an FCA denies a manufacturer's firework certification application, the FCA will notify the applicant in writing of the reasons for the denial. Following the issuance of a denial from an FCA, the applicant may seek reconsideration from the FCA, or appeal the reconsideration decision of the FCA to the PHMSA Administrator (see 49 CFR 173.65(a)(4)(iv)).

NOTIFYING PHMSA

The FCA will also report the denial to PHMSA, along with a list of all denial reasons. Common reasons for denial include:

- The application does not comply with the 2018 APA Standard 87-1A.
- There is no designated U.S. agent for a foreign manufacturer.
- The application documents contain inconsistent information.
- The effects listed on the chemical composition sheet either do not equal or exceed 100.
- The fusing is not sequential.

FCAs develop methods to help manufacturers quickly handle applications with formatting or editorial errors, typographical errors, or misplaced information. PHMSA does not expect FCAs to report denials attributed to non-safety issues.

DIFFERENCE BETWEEN FCA CERTIFICATION AND PHMSA APPROVAL

ARE THERE DIFFERENCES IN PREPARING DIVISION 1.4G CONSUMER FIREWORKS FOR TRANSPORTATION IF THEY HAVE BEEN CERTIFIED BY AN FCA RATHER THAN APPROVED BY PHMSA?

The FCA will issue the manufacturer a unique identifier for the device, called an "FC" number. This can be differentiated from a PHMSA-issued "EX" number, as shown below:

FC XXX 2023 01 ZZZZ

FC ID YEAR MONTH SEQUENTIAL IDENTIFYING DEVICE

EX 2023 01 ZZZZ

YEAR MONTH SEQUENTIAL IDENTIFYING DEVICE



MANUFACTURER RECORD KEEPING

MANUFACTURERS MUST KEEP RECORDS OF FIREWORKS CERTIFICATIONS

49 CFR 173.65(b) requires that the manufacturer and importer must maintain a paper record or an electronic image of the certificate, demonstrating compliance with this section. Each record must clearly provide the unique identifier assigned (i.e., FC number) to the firework device and the FCA that certified the device. The certification must be accessible at or through the manufacturer's principal place of business and be made available, upon request, to an authorized official of a Federal, State, or local government agency at a reasonable time and location.

Copies of certification records must be maintained for five (5) years following import of fireworks. The manufacturer provides the certification record to each entity (e.g., importers or shippers) responsible for offering the fireworks during transportation, ensuring they are in possession of the certification record.



IMPORTERS AND CARRIERS

WHAT IMPORTERS NEED TO KNOW

HOW DOES THE FCA CERTIFICATION PROCESS AFFECT AN IMPORTER’S ROLE IN TRANSPORTING DIVISION 1.4G CONSUMER FIREWORKS?

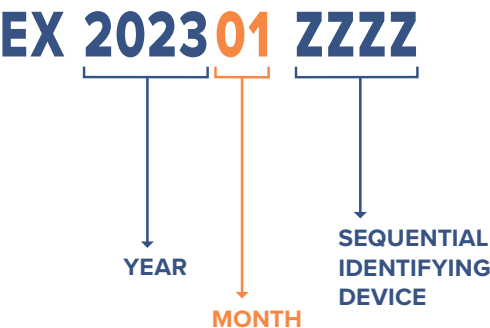
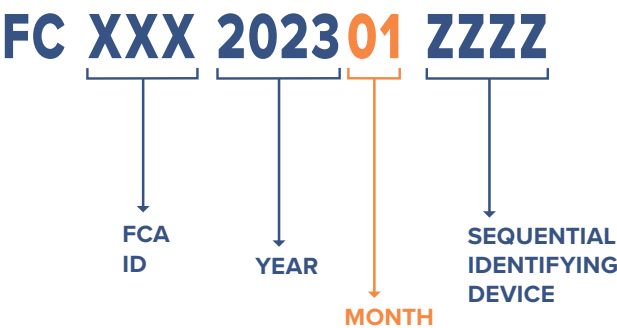
For shipments certified by an FCA, the importer will be required to maintain a paper record or electronic image of the certification when the fireworks are in transportation and must keep a record of the certification for five (5) years following import of the fireworks. The certification record must be made available to an authorized official of a federal, state, or local government agency upon request (see 49 CFR 173.65(b)).

WHAT CARRIERS NEED TO KNOW

WHAT IS THE DIFFERENCE BETWEEN TRANSPORTING FCA CERTIFIED DIVISION 1.4G CONSUMER FIREWORKS AND DOT-APPROVED DIVISION 1.4G CONSUMER FIREWORKS?

For FCA-certified fireworks, the markings and shipping papers will show an “FC” number.

For DOT-approved fireworks, the markings and shipping papers will show an “EX” number.



Carriers will practice the same safe handling practices for Division 1.4G consumer fireworks for packages with FC and EX numbers. There are no other differences for a carrier transporting Division 1.4G consumer fireworks.

For additional information contact:
The Hazardous Materials Info Center

1-800-HMR-4922

(1-800-467-4922)

Email: infocntr@dot.gov

www.hazmat.dot.gov

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