

INITIAL STATEMENT OF REASONS (ISOR)

CALIFORNIA CODE OF REGULATIONS

TITLE 19, DIVISION 1, CHAPTER 6

Recognition of Model and High Power Rocket Motor Certification

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EXISTING LAW

The California Department of Forestry and Fire Protection – Office of the State Fire Marshal (OSFM) administers the State's fireworks and pyrotechnics program under the California Health and Safety Code, Division 11, Part 2 (Fireworks and Pyrotechnic Devices), and the implementing regulations in Title 19, California Code of Regulations, Division 1, Chapter 6. Under this authority the OSFM classifies, registers, and regulates pyrotechnic devices, including model rocket motors and high power rocket motors, and licenses the persons and businesses that manufacture, import, distribute, and use them.

Health and Safety Code section 12552 authorizes the State Fire Marshal to adopt regulations for the classification of fireworks and related devices. Under the existing Title 19 regulations, a model rocket motor or high power rocket motor is classified only after the manufacturer, importer/exporter, or wholesaler submits the motor to the State Fire Marshal for testing and classification (see §§ 986.2, 1021, and 1031) and pays an original registration and classification fee (§ 981.3(e)(1)). The classified motor then bears the State Fire Marshal seal and the licensee's registration number (§ 1021(b)).

In practice, the motors that move through this process are already certified by one of the recognized national rocketry certification organizations — the Canadian Association of Rocketry (CAR), the National Association of Rocketry (NAR), or the Tripoli Rocketry Association (TRA) — and the State Fire Marshal's classification relies on the certification test data those organizations generate rather than on independent state testing. The current regulations nonetheless require a separate State Fire Marshal classification action for each motor model, layered on top of the national certification the motor already holds.

SPECIFIC PURPOSE AND RATIONALE

1. Problem being addressed

The existing classification process requires the State Fire Marshal to perform a separate classification action for each model of model rocket motor and high power rocket motor, even though the motor already carries a current certification from CAR, NAR, or TRA, and the State's classification depends on that same certification data. This produces a duplicative step: the

motor is certified once by the national organization, then classified again by the State on the strength of the very certification it already holds. The duplication imposes administrative burden and fees on manufacturers, importers, and wholesalers, consumes State Fire Marshal staff time on a review that adds no independent safety determination, and delays the lawful availability of certified motors to licensed operators in California without a corresponding safety benefit.

2. Anticipated benefits from this regulatory action

The proposed regulations establish that a model or high power rocket motor holding a current national certification is classified as such without a separate State Fire Marshal testing or classification action. The anticipated benefits are:

- Reduced administrative burden. Manufacturers, importers, and wholesalers are relieved of a duplicative submission-and-classification step for motors that are already nationally certified, and of the associated original registration and classification fee.
- More efficient use of State resources. The State Fire Marshal no longer expends staff time re-classifying motors based on certification data it already recognizes, allowing those resources to be directed to functions that require independent State review.
- Clear, authoritative basis for lawful sale and use. Manufacturers, retailers, and users gain a clear rule for determining which motors are lawful for sale and use in California — current national certification — rather than tracking a parallel State classification list that mirrors it.
- No reduction in safety. Because the State's existing classification already relies on national certification test data, recognizing that certification directly removes only the duplicative step, not any independent safety evaluation. The State Fire Marshal retains authority to limit recognition to currently certified, unmodified motors and to revoke recognition on safety grounds.

These benefits are consistent with the State's declared priority of re-engineering government processes to remove unnecessary administrative burden and to deliver services more efficiently, as expressed in Executive Order N-30-25 (July 15, 2025), which directs State entities to identify and pursue low- and no-cost measures that improve the efficiency of government operations. The proposed action is precisely such a measure: it removes a redundant administrative step at no cost to the State.

3. Factual Basis / Rationale

The goal of the proposed regulations is to align California's classification of model and high power rocket motors with the national certification framework the State already relies upon, thereby (1) eliminating a duplicative classification step that provides no independent safety benefit; (2) reducing administrative burden and fees on the regulated community; and (3) preserving the State Fire Marshal's authority over safety by limiting recognition to currently certified, unmodified motors and reserving the power to revoke recognition.

The factual premise is that the motors passing through the existing State classification process are already certified by CAR, NAR, or TRA, and that the State's classification depends on the

certification test data those organizations produce. Where the State's determination already rests on the national certification, requiring a separate State classification action for the same motor duplicates work without adding an independent safety finding. The proposed § 986.10 formalizes the existing reliance on national certification as the basis for classification, and the conforming amendments to §§ 980, 981.3, 986.2, 1021, and 1031 remove the duplicative submission, testing, fee, and classification requirements for motors so classified while preserving every existing pathway for motors that are not nationally certified.

SUMMARY

The proposed regulations add a new § 986.10 establishing that a model or high power rocket motor certified by CAR, NAR, or TRA (or a testing organization approved by the State Fire Marshal) is classified as a model or high power rocket motor without separate State Fire Marshal testing or classification. Recognition is limited to motors that hold a current certification, retain the configuration in which they were certified, and are intended for use in a model or high-power rocket; and the State Fire Marshal retains authority to revoke classification of any individual motor, or of an organization's classifications, upon a determination that applicable safety standards are not being met.

Conforming amendments to §§ 980, 981.3, 986.2, 1021, and 1031 remove, for motors classified under § 986.10 only, the definitional qualifiers, the original registration and classification fee, the test-sample submission requirement, and the submission-and-classification procedure that would otherwise duplicate the national certification. Each existing pathway is preserved in full for motors that are not classified under § 986.10, so no motor is left without a classification route.

TECHNICAL, THEORETICAL, AND/OR EMPIRICAL STUDY OR REPORT

In developing the proposed regulations, the State Fire Marshal relied on the certification standards and programs of the recognized national rocketry certification organizations and on the National Fire Protection Association (NFPA) codes governing rocket motors, including:

- NFPA 1125, Code for the Manufacture of Model Rocket and High Power Rocket Motors (2026 edition) – the de facto rocket motor testing standard, adopted in 46 states.¹
- NFPA 1127, Code for High Power Rocketry (2026 edition), for the total-impulse classification thresholds reflecting current national practice.
- The published motor certification programs and combined certified-motor listings of the Canadian Association of Rocketry, the National Association of Rocketry, and the Tripoli Rocketry Association.

- *Combined CAR/NAR/TRA Certified Rocket Motors List* available at:
<https://www.nar.org/CertifiedMotorListing>

¹ All 50 U.S. states except California, Illinois, Indiana, and Missouri.

NECESSITY

Introduction

California requires model and high power rocket motors to be classified before they may be lawfully sold and used. The existing classification process was built to generate or confirm a safety determination for each model of motor. In current practice, however, that determination is supplied by the national certification organizations, and the State Fire Marshal's classification relies on their test data. The result is a process that requires separate State action for each motor model without producing an independent safety finding — a duplication that is unnecessary to protect public safety and that imposes cost and delay on the regulated community and on the State.

Reliance on national certification

The proposed § 986.10 makes explicit what the existing process already assumes: that a motor certified by CAR, NAR, or TRA to the applicable NFPA standard has been evaluated for safety by a recognized testing organization, and that this certification is a sufficient basis for classification in California. Recognizing the certification directly, rather than re-performing a classification that rests on the same data, is necessary to eliminate the duplicative step while maintaining the safety basis for classification.

Preservation of State Fire Marshal authority

The proposed regulations are drafted so that recognition is necessary and sufficient only where safety is assured: § 986.10(d) limits recognition to motors that hold a current certification, retain their certified configuration, and are intended for model or high-power rocket use; and § 986.10(e) reserves the State Fire Marshal's authority to revoke classification of any individual motor, or of an organization's classifications, on a determination that applicable safety standards are not being met. These provisions are necessary to ensure that removing the duplicative step does not remove the State's ability to act on safety.

Conclusion

The proposed regulations are necessary to align California's classification of model and high power rocket motors with the national certification framework the State already relies upon, to remove a duplicative and burdensome classification step that provides no independent safety benefit, and to do so while preserving the State Fire Marshal's authority to protect public safety.

CONSIDERATION OF REASONABLE ALTERNATIVES TO THE REGULATION AND THE STATE FIRE MARSHAL'S REASONS FOR REJECTING THOSE ALTERNATIVES

The State Fire Marshal considered the alternatives below and determined that none would be more effective in carrying out the purpose of the action, or as effective and less burdensome to affected persons, than the proposed regulations. *OSFM to verify/modify*

Alternative #1 — No action (retain the existing separate classification process)

Under this alternative the State Fire Marshal would continue to require a separate classification action for each motor model already holding national certification. This alternative was rejected because it perpetuates a duplicative step that provides no independent safety benefit while continuing to impose administrative burden and fees on the regulated community and to consume State resources. It does not meet the purpose of the action, which is to remove that duplication.

Alternative #2 — Recognize a single certifying organization rather than all recognized organizations

Under this alternative the State Fire Marshal would recognize the certification of only one national organization. This alternative was rejected because California-available motors are certified across CAR, NAR, and TRA — different manufacturers route through different certifiers — so recognizing a single organization would leave a substantial portion of already-certified, safe motors without the benefit of the streamlined pathway, defeating the purpose of the action and creating arbitrary distinctions among functionally equivalent certified motors.

Alternative analysis conclusion

The proposed regulations most effectively achieve the purpose of removing a duplicative classification step while preserving safety and every existing classification pathway for non-certified motors. No less-burdensome alternative would achieve that purpose as effectively.

OSFM to verify/modify

EVIDENCE SUPPORTING FINDING OF NO SIGNIFICANT ADVERSE ECONOMIC IMPACT ON ANY BUSINESS

The State Fire Marshal has initially determined that the proposed regulations will not have a significant adverse economic impact on business. The proposed regulations remove a submission requirement and a fee for motors that are already nationally certified; they impose no new cost or requirement on any business. To the extent the regulations have any economic effect, that effect is a reduction in cost and administrative burden on manufacturers, importers, wholesalers, and retailers of certified motors. *OSFM to verify/modify*

ECONOMIC IMPACT ANALYSIS AND ASSESSMENT**Creation or elimination of jobs within the State of California**

The State Fire Marshal has determined that the proposed regulations will not have a significant impact on the creation or elimination of jobs. The regulations reduce an administrative step and a fee and do not alter how businesses conduct their operations in a manner that would create or eliminate jobs. *OSFM to verify/modify*

Creation of new businesses or elimination of existing businesses within the State of California

The State Fire Marshal has determined that the proposed regulations will not eliminate existing businesses and impose no barrier to new businesses. By reducing cost and administrative

burden for certified motors, the regulations may modestly ease conditions for businesses that sell or use them. *OSFM to verify/modify*

Expansion of businesses currently doing business within the State of California

The State Fire Marshal has determined that the proposed regulations will not limit or discourage the expansion of existing businesses and may modestly facilitate it by reducing the cost and delay associated with bringing certified motors to market in California. *OSFM to verify/modify*

Benefits of the regulations to the health and welfare of California residents, worker safety, and the State's environment

The proposed regulations maintain the existing safety basis for classification by relying on national certification and by preserving the State Fire Marshal's authority to limit and revoke recognition on safety grounds. They provide a clearer, more authoritative basis for determining which motors are lawful for sale and use in California, which supports safe and lawful participation in model and high-power rocketry.

LOCAL MANDATE DETERMINATION

The proposed regulations do not impose any mandate on local agencies or school districts.

COORDINATION WITH FEDERAL LAW

The State Fire Marshal has determined that the proposed regulatory action neither conflicts with nor duplicates any federal statute or regulation. Federal transportation and explosives requirements applicable to rocket motors are administered under separate federal authority and are unaffected by the classification of motors under Title 19; the proposed regulations address only State classification.

DOCUMENTS INCORPORATED BY REFERENCE

The proposed § 986.10 references NFPA 1125, Code for the Manufacture of Model Rocket and High Power Rocket Motors (2026 edition), as the standard to which motors must be certified. The standard is referenced to identify the basis of the national certification the State recognizes.

Under California Code of Regulations, Title 1, Section 20, a document referenced in a regulation must be reasonably available to the affected public. NFPA 1125 is published by the National Fire Protection Association and is available from that organization. The certifying organizations' motor testing and certification procedures, to the extent referenced, are being made available to the public on request through the respective organizations; the final statement of reasons will specify the source from which each such document may be obtained.

■ **DRAFTING FLAG** — *Conversations with NAR and Tripoli are ongoing regarding public availability of their respective testing policies and procedures, as access to these documents is currently restricted to organization members.*

SPECIFIC SECTION-BY-SECTION ANALYSIS

Proposed additions are shown underlined; deletions are shown ~~struck through~~. Each section is followed by its Purpose and Necessity. Unmodified subdivisions and paragraphs are omitted for brevity.

§ 980. Definitions.

(e) “E” Definitions. (3) Experimental High Power Rocket. Non-professional rockets which are propelled by commercially manufactured high-power solid propellant rocket motors. (4) Experimental High Power Rocket Motor. A State Fire Marshal approved, commercially manufactured rocket propulsion device containing a solid propellant charge wherein all the ingredients are pre-mixed and which produces more than 160 Newton-seconds (36 lb.-seconds) but shall not exceed 10,240 <u>40,960</u> Newton-seconds (2302.2 <u>9,209</u> lb.-seconds) of total impulse.	Purpose. Removes “Experimental” from both defined terms; removes “solid propellant” and “pre-mixed” language; removes “State Fire Marshal approved” qualifier; conforms the total-impulse ceiling to 40,960 Newton-seconds (9,209 lb.-seconds). Necessity. “Experimental” is a historical artifact and is removed to conform to standard terminology under NFPA 1127. The “State Fire Marshal approved” language is removed to conform the definition to § 986.10, under which qualifying motors are classified by national certification rather than by a separate State Fire Marshal approval action. The “solid propellant ... pre-mixed” language is removed because it excludes certified motors of other propellant configurations (e.g., hybrid) that are functionally equivalent for classification purposes; propellant type is immaterial where a motor carries national certification. The total-impulse ceiling is revised to align with current national practice under NFPA 1127.
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§ 981.3. License Fees.

(e) The original registration and classification fees shall be as follows: (1) Original registration and classification fee for each model of model rocket motor, <u>except a model rocket motor classified per § 986.10</u>, high power rocket or motor, <u>except a high power rocket motor classified per § 986.10</u>, safe and sane, party popper/snap caps/snappers, agricultural/wildlife, or exempt fireworks \$250.00	Purpose. Exempts motors classified under § 986.10 from the original registration and classification fee. Necessity. The classification fee compensates the State Fire Marshal for performing classification. Because a motor classified under § 986.10 requires no State Fire Marshal classification action, no classification fee applies. Motors classified through the existing process under §§ 1021 and 1031 remain subject to the fee.
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§ 986.2. Test Samples.

(b) Undischarged samples of each item which is to be examined, classified, and labeled as “agricultural wildlife”, “emergency signaling devices”, “model rocket ~~engine motor~~”, except a model rocket motor classified per § 986.10, and “high-power rocket ~~engine motor~~”, except a high power rocket motor classified per § 986.10, shall be submitted to the State Fire Marshal for testing. The number of undischarged samples necessary for each test shall be determined by the State Fire Marshal and in no case shall be less than three (3).

Purpose. Exempts motors classified under § 986.10 from the requirement to submit undischarged samples to the State Fire Marshal for testing. Additionally, standardizes “motor” terminology.

Necessity. The sample-submission requirement supports State Fire Marshal testing for classification. Because motors classified under § 986.10 are certified by a national organization and not tested by the State Fire Marshal, sample submission serves no purpose for those motors. The requirement is retained for motors classified through the existing process.

§ 986.10. Model and High Power Rocket Motors. (NEW)

(a) A model rocket motor or a model rocket motor reloading kit that meets the requirements of this section shall be classified as a model rocket motor.

(b) A high power rocket motor or a high power rocket motor reloading kit that meets the requirements of this section shall be classified as a high power rocket motor.

(c) Model and high power rocket motors and motor reloading kits shall be tested and certified in accordance with NFPA 1125: Code for the Manufacture of Model Rocket and High-Power Rocket Motors, 2026 edition, by the Canadian Association of Rocketry (CAR), the National Association of Rocketry (NAR), the Tripoli Rocketry Association (TRA), or a testing organization approved by the State Fire Marshal.

(d) Classification under this section applies only to a rocket motor that:

(1) has a current certification by an organization named in subdivision (c); and

(2) retains the configuration in which it was certified; and

(3) is intended for use in a model or high-power rocket.

(e) The State Fire Marshal may revoke classification of any individual motor, or classifications from any organization named in

Purpose. Establishes that a model or high power rocket motor certified to NFPA 1125 by the Canadian Association of Rocketry, the National Association of Rocketry, or the Tripoli Rocketry Association (or an organization approved by the State Fire Marshal) is classified as such without separate State Fire Marshal testing or classification.

Necessity. The State Fire Marshal’s existing rocket motor classification process relies on test data generated by these national certification organizations rather than on independent state testing. This section formalizes existing practice, eliminating a duplicative classification step that provides no additional safety benefit. It also provides manufacturers, retailers, and users with a clear, authoritative basis for determining which motors are lawful for sale and use in California. Subdivisions (d) and (e) preserve State Fire Marshal authority by limiting recognition to currently certified, unmodified motors and by reserving the State Fire Marshal’s power to revoke recognition of any motor or organization on safety grounds.

subdivision (c), upon a determination that applicable safety standards are not being met.

Authority cited: Section 12552, Health and Safety Code.

Reference: Section 12552, Health and Safety Code.

§ 1021. Classification and Labeling.

(a) All types of model rocket motors, except those classified per § 986.10, shall be submitted to the State Fire Marshal by a licensed model rocket motor manufacturer, importer/exporter, or wholesaler for classification. A copy of a certificate of classification indicating the item has been classified as a model rocket motor by a laboratory approved by the Department of Transportation shall accompany the request for classification by the State Fire Marshal. Three samples of each motor type shall be submitted to the State Fire Marshal for classification. Standards for the classification of model rocket motors shall conform to the National Fire Protection Association (N.F.P.A.) 1122 (1987), Code for Unmanned Rockets, Sections 3-1.1 through 3-1.10.

(b) Individual ~~engines~~ motors shall bear the California State Fire Marshal seal and the registration number of the licensee.

Purpose. Exempts motors classified under § 986.10 from the existing submission-and-classification procedure, while preserving that procedure for motors not classified under § 986.10. Additionally, standardizes “motor” terminology.

Necessity. The amendment preserves the existing classification pathway for any model rocket motor that is not nationally certified, while relieving certified motors of a duplicative submission requirement. No motor is left without a classification pathway.

§ 1031. Classification and Labeling.

(a) All types of ~~experimental~~ high power rocket motors, except those classified per § 986.10, shall be submitted by a licensed ~~experimental~~ high power rocket motor manufacturer, importer/exporter, or wholesaler to the State Fire Marshal for classification.

Purpose. Exempts motors classified under § 986.10 from the existing submission-and-classification procedure and removes “experimental” as a qualifier on the covered motors and manufacturers to align with current national terminology under NFPA 1127.

Necessity. As with § 1021, the existing pathway is preserved for high power rocket motors not classified under § 986.10, while certified motors are relieved of the duplicative submission requirement. Removal of the “experimental” qualifier conforms the terminology to current national practice.