Moreno Valley Fire Prevention Bureau

# **Model Rocket Guideline**



Approved and Authorized By: Adria Reinertson, Fire Marshal Issued: May 5, 2017

# Guideline for Model Rocket Requirements And Permit Information

# PURPOSE

The intent of this guideline is to provide the requirements and regulations for the storage, sale and use of model rocket motors. The requirements are contained in the California Code of Regulations Title 19, Division 1, Chapter 6; NFPA 1122 and Health and Safety Code 12552. The following guidelines will ensure that appropriate safety requirements are met.

# SCOPE

The scope of this guideline will apply to all permit requests for sale and use of model rockets within the jurisdiction of the City of Moreno Valley.

## SUBMITTAL REQUIREMENTS

#### Permits for Launching/Sales

A. A valid permit is required from the Moreno Valley Fire Prevention Bureau to store or sell model rocket motors at retail stores and to fire/launch a model rocket anywhere within the jurisdiction of Moreno Valley. High power rocketry is prohibited within the jurisdiction of Moreno Valley. Maximum motor size permitted is "D". Permits are valid only for the dates indicated on the application. Persons applying for a permit to launch model rockets shall provide the following a minimum of ten (10) days prior to the proposed launch date:

- 1. A letter requesting a permit to launch model rockets which includes:
- 2. Name, address and phone number of the person supervising the launch;
- 3. The address and location where the model rocket launch activity is to take place;
- 4. The date(s) and time(s) of any launch.
- 5. A letter of permission from the owner of the land/property where the launch site is located.
- 6. A list of the number, types, sizes and brands of the model rocket engines that will be used.
- B. A detailed site plan of the launch site showing:
  - 1. Prevailing wind direction.

- 2. Diameter of launch site, in feet.
- 3. Barriers around launch site.
- 4. Description of the area (e.g. asphalt parking lot, school yard with landscaped lawn, open field area, etc).
- 5. Spectator area, all buildings, roads, fences, overhead power lines, trees, freeways, fire hydrants, fire access roads and rocket recovery area.
- 6. Distance in feet between all above items and launch site.
- C. A "hold harmless" letter absolving the City of Moreno Valley and the Riverside County Fire Department of any liability or responsibility in connection with the proposed activity.

In no case will a permit be issued to fire model rockets in any grain field, dry grass area, brush or forest covered land or within 1000' of any of these areas.

#### **State Requirements**

A. All model rocket motors stored, sold or fired shall be approved, classified and labeled in accordance with CCR Title 19, Chapter 6, Article 17, Section 1021 (a) and (b). All model rocket motors which do not comply with the above are illegal and are not permitted to be stored, launched, or sold at retail.

B. Model rocket motors shall not be sold, given or delivered to any person under 18 years of age. Exceptions to this are:

- 1. Model rocket motors bearing the standardized coding ¼ A, ½ A, A, B, C and D may be sold, given or delivered to any person 14 years of age or older.
- 2. Persons who are 12 years of age or older and who are taking part in a model rocket education program may receive model rocket motors and launch approved model rocket motors when under the direct supervision and control of a person 18 years of age or older. Model rocket motors shall be obtained only from the adult in charge of the launching. Approved model rocket motors for this exception shall bear the motor coding ¼ A, ½ A, A, B, C and D.
- C. Obtain approval from the FAA (310) 297-1642.

#### **Retail Sales**

A. For permitting purposes, the retailer shall provide the Moreno Valley Fire Department the following information:

- 1. Brand and size/type of model rocket motors.
- 2. Material Safety Data Sheets (MSDS) on all types and brands of model rocket motors.
- 3. Total quantity/number of model rocket motors to be stored including the total weight of the product to be stored and/ or sold.

### Safety

- A. The rocket shall include, within its construction, an effective means for returning the rocket safely to the ground without causing injury to persons or property.
- B. The model rocket shall not contain any type of explosive or pyrotechnic warhead.
- C. No person, other than the named permit holder and/ or members of that organization, shall be permitted within 100' of the launch site. It is recommended that lines or barriers be used to restrain spectators from this area.
- D. Except for those persons actually participating in the firing, no member of the organization that is firing "model rockets" shall be permitted within 50' of any launching device.
- E. Surface wind at the launch site shall not exceed 20 miles per hour. Vertical visibility at the site shall be at least 2,000 feet.
- F. Model rockets shall only be launched during daylight hours.

G. The launch site shall consist of a firing area and a recovery area that shall be free from any structures, vegetation area, freeways or roads, high voltage lines or other items deemed hazardous by the Moreno Valley Fire Department.

H. Model rocket engines shall not be clustered in any manner.

I. Model rockets shall be launched only from platforms meeting the following criteria:

- 1. A launch guide type rod, tube or other approved device shall be used to restrict the horizontal motion of the rocket until sufficient flight velocity is achieved to maintain stability during flight. This device shall be placed so that its end is above eye level.
- 2. Model rocket engine ignition shall be by remote electrical means only and shall be properly controlled by the person launching the model rocket.

3. The horizontal launching angle shall not be less than 60 degrees.

# Permit Fee

A permit fee will be charged for the Explosives – Model Rockets Permit. A permit is required for launching, storage and retail sales.

1. Permit fees will not be collected from public schools within Moreno Valley jurisdiction, when students are participating in an educational program provided by their school.