

VIRGINIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
DIVISION OF BUILDING AND FIRE REGULATION

Code Change Form for the 2012 Code Change Cycle

Code Change Number: _____

Proponent Information

(Check one): Individual Government Entity Company

Name: **DRAFT** _____

Representing: _____

Mailing Address: _____

Email Address: _____

Telephone Number: _____

Proposal Information **DRAFT DRAFT DRAFT** **DRAFT DRAFT DRAFT**

Code(s) and Section(s): SFPC Sections 107.2, 107.13, 5605.1 and 5605.1.1 _____

Proposed Change (including all relevant section numbers, if multiple sections):

Change Table 107.2 as follows:

**Table 107.2
Operational Permit Requirements (to be filled in by local jurisdiction)**

Description	Permit Required (yes or no)	Permit Fee	Inspection Fee
<p>Explosives. An operational permit is required for the manufacture, storage, handling, sale or use of any quantity of explosive, explosive material, fireworks, or pyrotechnic special effects within the scope of Chapter 56.</p> <p>Exception: Storage in Group R-3 or R-5 occupancies of smokeless propellant, black powder and small arms primers for personal use, not for resale and in accordance with the quantity limitations and conditions set forth in Section 5601.1, exception numbers four and twelve.</p>			
<p>Explosives. An operational permit is required for the <u>restricted manufacture of explosives within the scope of Chapter 56.</u></p>			
<p>Explosives. An operational permit is required for the <u>unrestricted manufacture of explosives within the scope of Chapter 56.</u></p>			

Add the following definitions to Chapter 2 to read:

Manufacturing. Mixing, blending, extruding, assembling articles, disassembling, chemical synthesis, and other functions involved in making a product or device that is intended to explode.

Unrestricted Explosives Manufacture. Any company, person or group of persons engaged in the

business of manufacturing or producing explosive materials at a fixed site or facility for the purpose of commercial sale, use or distribution of explosives.

Restricted Explosives Manufacture. An individual engaged in the incidental manufacture or production of explosive materials, composed of commercially available components that are packaged or marketed for the purpose of producing explosive materials, including reactive targets, at a location not within the definition of unrestricted explosives manufacture, is for immediate use at the site of the incidental explosive manufacturing or production without residual storage, and does not involve or include the bulk mixing and delivery vehicles that are within the scope of NFPA 495.

Reactive (exploding) targets. A target designator intended to be shot at with a firearm and is purchased or obtained through a commercial or retail outlet, is comprised of two or more components in pre-sized quantities of 1 pound (0.453592 kg) or less that are advertised and sold together with instructions on how to combine the components to create a target that explodes upon impact.

Change Section 107.13 to read as follows:

107.13. State explosives, blasting agents, theatrical flame effects and firework permit fees: Applications for firework or pyrotechnic displays shall be submitted to and received by the State Fire Marshal's Office not less than 15 days prior to the planned event. Fees for permits issued by the State Fire Marshal's office for the storage, use, sale or manufacture of explosives or blasting agents, and for the display of fireworks and flame effects on state-owned property shall be as follows:

1. \$125 per year per magazine to store explosives and blasting agents.
2. \$200 per year per city or county to use explosives and blasting agents.
3. \$150 per year to sell explosives and blasting agents.
4. \$200 per year to manufacture explosives, blasting agents and fireworks for Unrestricted Explosives Manufacture.
5. \$20 per year for Restricted Explosives Manufacture.

Change Section 5605.1 to read as follows:

5605.1 General. The restricted and unrestricted manufacture, assembly and testing of explosives, ammunition, blasting agents and fireworks shall comply with the requirements of this section and NFPA 495, ~~NFPA 1124~~ or NFPA 1126.

Exceptions:

1. The hand loading of small arms ammunition prepared for personal use and not offered for resale.
2. The mixing and loading of blasting agents at blasting sites in accordance with NFPA 495.
3. ~~The use of binary explosives or phosphoric materials in blasting or pyrotechnic special effects applications in accordance with NFPA 495 or NFPA 1126.~~

5605.1.1 Permits. Permits for the restricted and unrestricted explosives manufacture, assembly and testing of explosives, ammunition, blasting agents and fireworks shall be required as set forth in Section 107.2 and regulated in accordance with this section. A permit ~~to manufacture~~ for unrestricted explosives manufacturing of any explosive material ~~in any quantity~~ shall be prohibited unless such manufacture is authorized by a federal license and conducted

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in accordance with recognized safety practices. All restricted explosives manufacturing shall comply with the instructions provided by the supplier of the components used in the manufacture of the explosive material.

Exceptions:

1. Any recreational use of reactive targets is not required to obtain a permit for restricted explosives manufacture or explosives use when such manufacture and use complies with all of the following:
 - a. The manufacture and use is limited to one (1) pound or less per unit on private property with the permission of the property owner and used no closer than 500 feet from a roadway or structure.
 - b. The manufacture of the reactive target complies with the instructions provided by the producer of the components used in the manufacture.
 - c. The reactive target manufactured is for immediate use without any residual storage or transportation, and
 - d. The exploding or use of the target is in conformance with its intended purpose as described by the producer of the components used in the manufacture of the reactive target; is initiated in a manner that complies with the instructions or description provided by the manufacturer of the reactive target, and does not involve the deliberate destruction of any property, vehicle, structure or animal life.
2. The owner of real estate parcels of five or more acres conforming to the definition of “real estate devoted to agricultural use” or “real estate devoted to horticultural use” in Section 58.1-3230 of the Code of Virginia is not required to obtain a permit for restricted explosives manufacture when such manufacture complies with all of the following:
 - a. Is conducted by the owner of such real estate,
 - b. The manufacture of the explosives complies with the instructions provided by the producer of the components used in the manufacture.
 - c. The explosive used does not include reactive targets,
 - d. The explosive material manufactured is for immediate use without any residual storage or transportation, and
 - e. A permit to use explosives has been obtained in accordance with Section 107.2.
3. An applicant that is performing non-personal, business work is not required to obtain a permit for restricted explosives manufacture when such manufacture complies with all of the following:
 - a. The applicant’s certified Blaster who manufactures the explosives complies with the instructions provided by the producer of the components used in the manufacture.
 - b. The explosive used does not include the use of reactive targets.
 - c. The explosive material manufactured is for immediate use without any residual storage or transportation, and
 - d. A permit to use explosives has been obtained in accordance with Section 107.2.

Supporting Statement (including intent, need, and impact of the proposal):

The Code of Virginia (§ 27-97) provides direction for manufacturers of explosives to provide information on their manufacturing operation. This change reflects some evolutions on the manufacture of explosives that have existed for some time but never fully acted upon. Recent events and inquiries on explosive manufacturing have necessitated the need to visit the subject in a more comprehensive fashion with particular attention being given to explosives manufactured or produced at the time and at the site of their intended use.

This change proposes definitions created to differentiate between two conditions for the manufacture of explosives:

The unrestricted category is for the fixed site, fixed facility condition where the amount of explosives manufactured annually is usually measured in pounds or tons.

The restricted category is intended to include any mixing or manufacturing operation that produces a smaller quantity of explosive material, usually in the one or two pounds range, is for immediate use, does not include or involve the storage of the manufactured explosive, and excludes mobile operations that are conducted on a vehicle that is specifically designed and constructed for the purpose (See NFPA 495-10, Chapters 5, 6 and 7). A key phrase in the proposed definition is “commercially available components” which does **not** include or permit the manufacture of explosives through a *cookbook* type of manufacturing operation. To manufacture explosives contrary to this definition in the SFPC could be prosecuted as a criminal violation of § 18.2-85 of the Code of Virginia and subject to arrest by any law enforcement officer.

In order to obtain a permit for either level of manufacture, the applicant would have to meet the requirements of a “designated individual”. Three exceptions are provided as follows:

1. The individual that mixes commercially available and advertised components that produces a “reactive target” that becomes, by definition, a blasting agent. The user of reactive targets would be limited to manufacturing targets not greater than one pound per unit. The use of such targets would be confined to private property with the property owner’s permission.
2. Exception 2 (specifically 2c) effectively continues the current scheme – meaning no changes - for farmers. Presently, in state enforced areas, a farmer must get a permit to use explosives which will cost a total of \$437.00 (\$250 for 1-year permit to use plus \$187 for 3-year BCC.) A farmer is not required to be certified as a Blaster nor is required to produce proof of insurance. At minimum, a BCC is needed to comply with § 27-97.2 of the COV for the required national criminal history records check.
3. Exception 3 (specifically 3d) effectively continues the current scheme for all applicants and/or certified Blasters who use products such as Kinepak™, Kinepouch™ or Kenistik™. These products are binary components that are mixed to create a blasting agent (explosive) on the site of its intended use much like reactive targets. These products are designed and intended to be initiated through the use of detonators (blasting caps). Presently, in state enforced areas, an applicant must get a permit to use explosives which will cost \$250.00. Under such permit a certified Blaster must be present for the loading and firing of the explosives. Each authorized Blaster represents an individual or personal

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investment of \$187 for a 3-year certification which includes the national criminal history records check in order to comply with § 27-97.2 of the COV. In other words, those persons already certified as a Blaster meet the requirements of a “designated individual” and are mixing binary components under a permit to USE explosives. Examples are (1) a utility company employee who is a certified blaster, uses a product known as Kinepak™ in the preparation for setting a utility pole and (2) the employee of a cemetery breaking rock for an internment site.

Verbal support for this concept has been expressed by the Institute of Manufacturers of Explosives (IME).

The deletion of Exception #3 in Section 5605.1 is to correct an error that has existed since before the final IFC draft in July 1998. None of the legacy codes had such an exception and in researching the question with ICC staff, it is not known where or from whom this exception originated nor is there any explanatory material on file to support the exception’s existence.

Reading the exception in its present form does not make sense if you were to ask the question, does this mean that if the explosives were manufactured on-site, their use is exempt?

Remembering this exception is under the manufacturing section of the code, it would make more sense if the exception were to read, “the use mixing of binary explosives or phosphoric materials in blasting or pyrotechnic special effects applications in accordance with NFPA 495 or NFPA 1126.” If that were to make more sense, then it would be partly redundant to exception #2 on explosive materials.

NFPA 1126, Chapter 7 addresses the “manufacture” of pyrotechnics used in proximity to an audience and while it is a short chapter, the provisions established included, product identification, the manufacturer’s description of use and hazards, its intended use, premeasured and packaged components, etc. Therefore the reference to NFPA 1126 should be relocated to the charging section as an addition to NFPA 1124, the standard for the manufacture of fireworks.

Submittal Information

Date Submitted: _____

The proposal may be submitted by email as an attachment, by fax, by mail, or by hand delivery.

Please submit the proposal to:

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