The Honorable William W. Davenport  
Commonwealth’s Attorney  
Post Office Box 25  
Chesterfield, Virginia 23832

Dear Mr. Davenport:

I am responding to your request for an official advisory Opinion in accordance with § 2.2-505 of the Code of Virginia.

**Issue Presented**

You inquire whether the recreational use of Tannerite violates § 18.2-85 of the Code of Virginia. In relevant part, that statute makes it a Class 5 felony to use or possess an explosive material, unless for a lawful purpose.

**Response**

Tannerite, like many other substances, is an explosive material within the meaning of § 18.2-85 of the Code of Virginia, but its use or possession is not illegal so long as the use or possession is for a lawful purpose such as the recreational use for which it is intended. Whether any particular use or possession of Tannerite is for an illegal purpose would be a question of fact about which I can express no opinion.

**Background**

Tannerite is the brand name of a binary explosive that is marketed as a shot indicator for firearms practice.\(^1\) Other binary explosives that are similar to Tannerite are sold under different brand names. They are in common use and are sold by large sporting goods chain stores. Binary explosives are supplied as two separate powders. After the powders are mixed, they will detonate when hit with a bullet from a high-powered rifle.\(^2\)

In your request, you indicate that Tannerite has been used in Chesterfield County on private property with the consent of the property owner and also by the property owner. You relate that when it is shot with a high-powered rifle, it produces an explosion that can be heard for miles and has made nearby homeowners concerned.

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\(^1\) [http://www.tannerite.com/](http://www.tannerite.com/).

\(^2\) *Id.*
Applicable Law and Discussion

Section 18.2-85 provides, in relevant part, that “[a]ny person who . . . (ii) manufactures, transports, distributes, possesses or uses a fire bomb or explosive materials or devices shall be guilty of a Class 5 felony.” It defines “explosive material” as:

[A]ny chemical compound, mechanical mixture or device that is commonly used or can be used for the purpose of producing an explosion and which contains any oxidizing and combustive agents or other ingredients in such proportions, quantities or packaging that an ignition by fire, friction, concussion, percussion, detonation or by any part of the compound or mixture may cause a sudden generation of highly heated gases.

As described above, Tannerite is a product made up of two chemical compounds that a user mixes together to form a combined powder. This combined powder is then ignited by the concussion of a shot from a high-powered rifle, causing a sudden generation of highly heated gases. Accordingly, Tannerite constitutes an “explosive material” as defined in § 18.2-85.3

Although § 18.2-85 generally prohibits the use or possession of explosive materials, that use or possession is not a violation of the statute if done with a lawful purpose:

Nothing in this section shall prohibit the authorized manufacture, transportation, distribution, use or possession of any material, substance, or device . . . for scientific research, educational purposes or for any lawful purpose, subject to the provisions of §§ 27-97 and 27-97.2.4

While “any lawful purpose” is not further defined in § 18.2-85, recreational usage fits the ordinary and plain meaning of that phrase.5 Therefore, possession or use of Tannerite for a recreational purpose alone - in the absence of other circumstances - is not illegal. In this regard, Tannerite is no different from any number of other substances, such as gunpowder, black powder, butane, match heads, paint thinner, or gasoline, that meet the literal definition of “explosive material,” but that may be possessed legally in the absence of illegal acts or illegal intent.6

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3 See also United States v. Leeper, 2006 U.S. Dist. LEXIS 87193, 1, 7 (D. Kan 2006) (describing Tannerite as an “explosive material”).

4 Section 18.2-85. Sections 27-97 and 27-97.2 relate to the Virginia Statewide Fire Prevention Code, contained in 13 VA. ADMIN. CODE § 5-51-11 through 13 VA. ADMIN. CODE § 5-51-155. Although these regulations do not apply to the factual scenario you describe, they do place limits on the possession, storage, and use of explosive materials and fireworks. See 13 VA. ADMIN. CODE § 5-51-150. Commercial possession, storage, and use of Tannerite, as well as persons possessing, storing, or using large quantities of Tannerite, may be subject to Virginia Statewide Fire Prevention Code regulations. If that is the case, certain permits may be required in order to meet the statutory requirements.

5 Statutes are to be interpreted according to their plain language, for “‘[w]here the legislature has used words of a plain and definite import the courts cannot put upon them a construction which amounts to holding the legislature did not mean what it has actually expressed.’” Barr v. Town & Country Props, 240 Va. 292, 295, 396 S.E.2d 672, 674 (1990) (quoting Watkins v. Hall, 161 Va. 924, 930, 172 S.E. 445, 447 (1933)).

6 It has been held that the absence of a lawful purpose is not a negative element of the offense of unlawfully possessing explosive materials; and instead, the presence of a lawful purpose is an affirmative defense. Flanagan v. Commonwealth, 58 Va. App. 681, 699, 714 S.E.2d 212, 220 (Va. Ct. App. 2011). The facts of that case, however, involve a defendant’s possession of acetone peroxide, sulphuric acid, hydrogen peroxide, acetone, fuses, and a .223 caliber assault pistol (collectively, evidence that the defendant was making bombs), and his statement that he purchased some of the materials for making explosives because “he just liked to hear things go boom or bang.” The
While the use of Tannerite for its intended recreational purpose on private property, in the absence of other facts tending to show illegal intent, is thus not a felony violation of § 18.2-85, I express no opinion about whether such use might comprise a misdemeanor violation of other statutes or ordinances such as disturbing the peace or any applicable zoning or noise ordinances.7

Conclusion

It is therefore my opinion that while Tannerite is an explosive material within the meaning of § 18.2-85 of the Code of Virginia, its use or possession is not illegal so long as the use or possession is for a lawful purpose, such as the recreational use for which it is intended. Whether any particular use or possession of Tannerite is for an illegal purpose would be a question of fact about which I can express no opinion.

With kindest regards, I am

Very truly yours,

Mark R. Herring
Attorney General

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7 Even if the noise generated by recreational use of Tannerite does give rise to a misdemeanor violation of some other statute or ordinance, that fact alone would not make its use a felony violation of § 18.2-95, for the actual purpose of using it would still be recreational, which is a “lawful purpose” under the statute.