

**STATE OF TENNESSEE
OFFICE OF THE ATTORNEY GENERAL**

February 5, 2015

Opinion No. 15-12

Use of Exploding Targets

Question 1

Does the combining of ammonium nitrate, or some other oxidizer, with a sensitizer, such as aluminum powder, whether or not the compound is placed in a sealed device, constitute the criminal offense of manufacturing an explosive or an explosive weapon?

Opinion 1

Yes.

Question 2

Does the amount of oxidizer and sensitizer that are combined, or the level of the explosive capacity of the combination, affect the Answer to Question 1?

Opinion 2

No.

Question 3

Does the Answer to Question 1 change if the purpose for which a person combines an oxidizer and a sensitizer is to create an exploding target?

Opinion 3

No.

Question 4

Is it unlawful in Tennessee for a person without a federal explosives license or permit to mix the binary element of ammonium nitrate with a sensitizer to create an exploding target (ET) known as Tannerite and other various trade names?

Opinion 4

Yes.

Question 5

Does the key event of combining the binary raw materials of an exploding target into a single mixture create an explosive as defined by Tenn. Code Ann. § 68-105-102 of the Tennessee Blasting Standards Act?

Opinion 5

Yes; however, the Blasting Standards Act may not apply to the use of binary explosives as exploding targets.

Question 6

Does combining the binary raw materials of an exploding target into a single mixture capable of creating an explosion constitute the intentional or knowing possessing or manufacturing an explosive or an explosive weapon in violation of Tenn. Code Ann. § 39-17-1302?

Opinion 6

Yes.

Question 7

Is any federal or state license required for the act of combining ammonium nitrate, or some other oxidizer, with a sensitizer, such as aluminum powder, for the purpose of creating an exploding target in Tennessee? If so, is it a criminal offense for any person to combine such components without the required license?

Opinion 7

There does not appear to be any State or federal license that would permit the possession or manufacture in Tennessee of the binary explosives used as exploding targets.

ANALYSIS

You have asked about the applicability of Tennessee's prohibitions against explosives to commercially available binary explosives such as Tannerite. Binary explosives are "pre-packaged products consisting of two separate components, usually an oxidizer like ammonium nitrate and a fuel such as aluminum or another metal."¹ Tannerite is an example of a commercially available binary explosive used to create exploding targets. It is sold in an unmixed condition and is designed to be mixed in a container and detonated by a rifle shot.²

¹ Bureau of Alcohol, Tobacco, Firearms and Explosives, <https://www.atf.gov/content/Explosives/explosives-industry/explosives-how-binary-explosives> (last visited Jan. 28, 2015).

² See <http://www.tannerite.com/legal.php> (last visited Jan. 28, 2015); <http://www.tannerite.com/faq.php> (last visited Jan. 28, 2015).

It is a criminal offense intentionally or knowingly to possess, manufacture, transport, repair, or sell an explosive or an explosive weapon in Tennessee. Tenn. Code Ann. § 39-17-1302(a)(1).³ The term “explosive weapon” is defined to include “[a]ny sealed device containing dry ice or other chemically reactive substances for the purposes of causing an explosion by a chemical reaction.” Tenn. Code Ann. § 39-17-1301(4)(B)(ii). The term “explosive” is not defined in Title 39 of the Code, but the Tennessee Supreme Court has defined it generally as “a chemical-type substance such as dynamite, nitroglycerin, or gunpowder” and as “a substance or combination of substances which, upon rapid decomposition or combustion, cause [*sic*] an explosion.” *State v. McGouey*, 229 S.W.3d 668, 673 n.1 (Tenn. 2007) (citing and quoting *The Random House Dictionary of the English Language* 681, 682 (2d ed. 1987); 31A AM. JUR. 2d *Explosions and Explosives* § 2 (2002)).

Unlike federal regulations and some other states’ provisions, Tennessee’s prohibition against the possession or manufacture of explosives does not contain an exception for personal recreational use.⁴ *Cf. In re Joseph S.*, 698 N.W.2d 212, 226-27 (Neb. App. 2005) (noting that the possessor’s intent is irrelevant under Tennessee’s definition of explosive weapon). The statute does contain specific defenses for military or law-enforcement use, for use related to a lawful industrial or commercial enterprise, for dramatic performances and scientific research, and for display at museums. Tenn. Code Ann. § 39-17-1302(b). None of these defenses applies to an individual’s personal or recreational use of an explosive.

You have also asked about the Tennessee Blasting Standards Act, found at Tenn. Code Ann. § 68-105-101, *et seq.* It is not entirely clear whether the Blasting Standards Act applies to the possession or manufacture of binary explosives for use as exploding targets. The Act primarily regulates “blasting operations,” defined as “the use of explosives in the blasting of stone, rock, ore or any other natural formation, or in any construction or demolition work.” Tenn. Code Ann. §§ 68-105-102(7), -103, and -106. The title of the Act itself, though not determinative, suggests the Act is concerned with blasting operations.

However, the specifically listed exceptions to the Blasting Standards Act may suggest it applies to more than just blasting operations. *See* Tenn. Code Ann. § 68-105-120 (exempting agricultural and medicinal use of explosives, law enforcement and military operations, and legal fireworks). The language of at least two sections could be interpreted to apply to the purchase, receipt, or possession of any explosive, regardless of its purpose. *See* Tenn. Code Ann. § 68-105-113 and -114. If the Act covers more than just blasting operations, it probably permits the Department of Commerce and Insurance to inspect any place where any explosive is used or stored,

³ It is also a criminal offense to possess “any component part of an explosive . . . with the intent to produce or manufacture an explosive device.” Tenn. Code Ann. § 39-14-702(a).

⁴ Under federal law, the term “manufacturer” applies only to a person “engaged in the *business* of manufacturing explosive materials.” 18 U.S.C. § 841(h) (emphasis added); *see also* 27 C.F.R. § 555.11. Thus, no federal license is required to mix binary explosives for purely personal use. *See* Bureau of Alcohol, Tobacco, Firearms and Explosives, “Questions and Answers, 18 U.S.C. Chapter 40 and 27 CFR Part 555 (Revised 1/07),” at Nos. 37 and 48. The Virginia Attorney General’s Office recently opined that its statutory prohibition on “explosive material” did not apply to recreational use of binary explosives. *See* Va. Att’y Gen. Op. 14-044 (citing Virginia statute’s “any lawful purpose” exception).

and the Department's regulations may even apply to the unmixed components of a binary explosive. *See* Tenn. Code Ann. § 68-105-116; Tenn. Comp. R. & Regs. 0780-02-15-.08.

1. You ask if combining the elements of a binary explosive, such as ammonium nitrate and aluminum powder, constitutes the criminal offense of manufacturing an explosive. It does. The simple possession of the unmixed components of a binary explosive is not prohibited because, in their unmixed state, the components are not capable of detonation or combustion and, thus, would not constitute an explosive. However, once mixed, the resulting compound is capable of detonation or combustion and does constitute an explosive. *See* Tenn. Code Ann. § 39-17-1302(a)(1); *McGouey*, 229 S.W.3d at 673 n.1. Therefore, by mixing the separate chemical substances, one has made, or “manufactured,” an explosive.⁵

2. You ask if the answer to Question 1 is affected by the amount of chemicals used or the explosive capacity of their combination. It is not. The manufacture of explosives is prohibited regardless of the amount of chemicals combined or the explosive capacity of their combination. *See* Tenn. Code Ann. § 39-17-1302(a)(1); *McGouey*, 229 S.W.3d at 673 n.1. Once the chemically reactive substances are combined, they become an “explosive” within the meaning of the statute. The amount or size of explosive capacity is immaterial.

3. You ask if the answer to Question 1 changes when the binary explosive will be used as an exploding target. It does not. There are some exceptions to the prohibition against the possession or manufacture of explosives but none of the exceptions permits the possession or manufacture of exploding targets for personal use. *See* Tenn. Code Ann. § 39-17-1302(b).

4. You ask if it is unlawful for a person without a federal explosives license to combine the elements of a binary explosive for use as an exploding target. It is unlawful to mix binary explosives in Tennessee regardless of whether the person has a federal explosives license.

Explosives licenses are available under federal law. *See* 27 C.F.R. §§ 555.41 to 555.63. However, possession of a federal explosives license does not permit the licensee to violate state law. *See* 27 C.F.R. § 555.62. Tennessee does not permit the manufacture of binary explosives for exploding targets, and the possession of a federal explosives license does not exempt the holder from this prohibition. For further discussion, please refer to the answer to Question 7 below.

5. You ask if combining the elements of a binary explosive for use as an exploding target creates an explosive as defined in the Blasting Standards Act. It does. The Act defines “explosive” to mean:

any chemical compound or other substance or mechanical system intended for the purpose of producing an explosion, or that contains oxidizing and combustible units

⁵ This conclusion comports with the interpretation of federal law and other states' statutes. *See* Bureau of Alcohol, Tobacco, Firearms and Explosives, “Questions and Answers, 18 U.S.C. Chapter 40 and 27 CFR Part 555 (Revised 1/07),” at No. 17 (interpreting 18 U.S.C. § 841 and 27 C.F.R § 555.11 in the same manner); Va. Att’y Gen. Op. 14-044 (Oct. 1, 2014) (concluding Tannerite constitutes an “explosive material” as defined in the Virginia Code).

or other ingredients in such proportion or quantities that ignition by detonation may produce an explosion, capable of causing injury to persons or damage to property.⁶

Tenn. Code Ann. § 68-105-102(14). The applicable regulations define “manufacturing” to mean “mixing, blending, extruding, assembling, disassembling, chemical synthesis and other functions involved in making a product or device that is intended to explode.” Tenn. Comp. R. & Regs. 0780-02-15-.01(1)(l). Therefore, the act of mixing the elements of a binary explosive⁷ constitutes the manufacture of an explosive as defined by the Blasting Standards Act.

However, as discussed above, it is not clear the Blasting Standards Act applies to the use of explosives outside the context of a blasting operation. *See* Tenn. Code Ann. §§ 68-105-103, -106. Therefore, the Act might not apply to the use of binary explosives as exploding targets.

6. You ask if combining the elements of a binary explosive for use as an exploding target violates the prohibition against possessing or manufacturing an explosive. It does. Combining the elements of a binary explosive such as Tannerite to create an exploding target violates Tenn. Code Ann. § 39-17-1302. Once the chemicals are mixed an explosive is created, and there is no exception for the manufacture of exploding targets for personal use.

7. You ask if a federal or state license is required to combine the elements of a binary explosive for use as an exploding target and, if so, whether it is a criminal offense for someone to do so without a license. There does not appear to be any State or federal license that permits the possession or manufacture in Tennessee of binary explosives for use as exploding targets.

Tennessee’s prohibition against the possession or manufacture of explosives and explosive weapons exempts individuals who are “licensed by the state of Tennessee as a manufacturer, importer, or dealer in weapons.” Tenn. Code Ann. § 39-17-1302(b)(6). However, Tennessee does not issue licenses to manufacturers, importers, or dealers in weapons.⁸ *See* Tenn. Att’y Gen. Op. 05-014 (Feb. 2, 2005). Furthermore, the exemption for license holders only authorizes manufacture or possession that is “incident to carrying on the business for which licensed and is for scientific or research purposes or sale or disposition to [a military or law enforcement] organization.” Tenn. Code Ann. § 39-17-1302(b)(6). Therefore, even if some federal license satisfies Tennessee’s licensing requirement, possession of a license does not authorize the holder

⁶ Binary explosives used as exploding targets are capable of causing personal injury or property damage, particularly when misused. *See* <http://www.tannerite.com/safety.php> (last visited Jan. 28, 2015).

⁷ The blasting regulations define “binary explosive” as “a blasting explosive formed by mixing or combining two (2) phosphoric materials which must be specifically packaged for that purpose (for example, ammonium nitrate and nitromethane).” Tenn. Comp. R. & Regs. 0780-02-15-.01(1)(d); *see also id.* 0780-02-15-.08(1) (“[m]ixed or combined phosphoric materials are explosive materials”). “Phosphoric materials” are defined as “two (2) or more unmixed, commercially manufactured prepackaged chemical ingredients (including oxidizers, flammable liquids or solids or similar ingredients) that are not classified as explosives but that, where mixed or combined, form a blasting explosive.” Tenn. Comp. R. & Regs. 0780-02-15-.01(1)(m).

⁸ This Office has previously opined that a federal license to deal in firearms satisfies the licensing requirement for firearms dealers in Tennessee. *See* Tenn. Att’y Gen. Op. 05-014, at 1. However, that opinion relied on Tenn. Code Ann. § 39-17-1316(a)(1), which specifically provides that holders of appropriate federal licenses may sell firearms in Tennessee.

to mix binary explosives for use as exploding targets for personal use. *Cf.* 27 C.F.R. § 555.62 (“A license or permit issued under this part confers no right or privilege to conduct business or operations, including storage, contrary to State or other law.”)

The Blasting Standards Act creates three classifications of registration for the handling and detonation of blasting explosives: blaster, limited blaster, and handler. Tenn. Code Ann. § 68-105-106(e); *see also* Tenn. Comp. R. & Regs. 0780-02-15-.03 and -.04 (creating a fourth classification). However, these licenses apply to the use of explosives in blasting operations, not the manufacture of exploding targets. *See* Tenn. Code Ann. § 68-105-106(a) (“[N]o person shall detonate explosives *in any blasting operation*, unless the person is registered with the department.”) (emphasis added).

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