



An Affiliate of
ASTM INTERNATIONAL

October 1, 2019

TO MANUFACTURERS OF LESS LETHAL AEROSOL DEVICES:

Initiation of Certification Program for Less Lethal Aerosol Devices Used by Law Enforcement, Corrections, and Other Public Safety Officers

The Safety Equipment Institute (SEI) is pleased to announce the initiation of a certification program for Less Lethal Aerosol Devices to ASTM E3187-19, *Less Lethal Aerosol Devices Used by Law Enforcement, Corrections, and Other Public Safety Officers* along with the companion certification standard, ASTM E3215-19, *Standard Practice for Certification of Less Lethal Aerosol Devices Used by Law Enforcement, Corrections, and Other Public Safety Officers*.

I. Initiation of Certification Program for Less Lethal Aerosol Devices

SEI is ready to begin accepting applications for Less Lethal Aerosol (LLA) Devices approvals. SEI is partnering with Eurofins EAG Materials Science (EAG Laboratory) to conduct initial and surveillance certification testing for LLA devices that you intend to certify. Specific details regarding the certification program will be reviewed with you once you are ready to initiate certification of your product(s). This will include signing an SEI Manufacturers Agreement, which establishes a formal agreement between our organizations, and obtaining credentials to review the SEI Certification Program Manual (CPM) that details the requirements of the certification program.

General details regarding the program are as noted below.

II. SEI Fees, Testing Laboratory Fees, Sample Requirements and Quality Auditing

The Testing Laboratory Fee Schedule for ASTM E3187-19, *Less Lethal Aerosol Devices Used by Law Enforcement, Corrections, and Other Public Safety Officers* is provided as Attachment A of this Bulletin. These fees will also be included in the next revision of SEI's Certification Program Manual. Please note that SEI has negotiated the attached fees with EAG Laboratory for this certification program. However, SEI will add a 10% surcharge to the prices listed in the attached fee schedule to the final invoice that you receive from SEI, which is generated when testing is completed.

In addition to required testing, the ASTM E3215-19, *Standard Practice for Certification of Less Lethal Aerosol Devices Used by Law Enforcement, Corrections, and Other Public Safety Officers* requires SEI to conduct a surveillance quality audit and inspection program of the manufacturing facilities of the certified products, and details will be discussed and scheduled once we initiate certification of your product(s).



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III. Application Processing

All certification submittal request(s) shall 1) be submitted directly to SEI (Mr. William Fithian) and 2) include a completed submittal package for each LLA Device model. Instructions for completing a submittal package are included as Attachment B.

Following a review of each submittal request, SEI will determine the applicable test program. SEI will then direct manufacturers to forward the required number of samples which shall be submitted directly to EAG Laboratory at the following address:

Eurofins EAG Materials Science
2672 Metro Blvd.
Maryland Heights, MO 63043
Attn: Lynn Zhang, Ph.D.
Phone: +1-314-227-0864; email: LynnZhang@eurofinsEAG.com

Your assistance in following these procedures will assist SEI, EAG Laboratory, and SEI auditors in ensuring an orderly certification process.

We hope this information is helpful to you. Please feel free to call the SEI Office if you have any questions or if we can be of other assistance to you.

Sincerely,



William A. Fithian
Technical Director

cc: Lynn X. Zhang, Ph.D., EAG Laboratory
SEI Auditors

ATTACHMENT A

Eurofins EAG Materials Science (EAG Laboratory)

ASTM E3187-19 / ASTM E3215-19 - Less Lethal Aerosol Devices Standard

Initial & Annual Certification

Test Description	Paragraph	Preconditioning	Procedure	Testing Fee	Sample Needs	Categories of N/C
Requirements for Test Items	6.2.1-6.2.2; Generic Requirements	None	Checklist (inspection)	\$150	3 devices	Critical
Requirements for Test Items	6.2.4; Resistance to Crushing	6.2.3: Ambient for >60 minutes	Section 5.3; <i>Cast Standard for Police Chemical Irritant Sprays: CS and PAVA</i>	\$450	3 devices	Critical
	6.2.4.1; Spray Pattern Assessment	6.2.4; Resistance to Crushing	Section 7	\$450	(same devices)	Critical
	6.2.4.2; Generic Requirements	6.2.4; Resistance to Crushing	6.2.1-6.2.2; Checklist (inspection)	\$150	(same devices)	Critical
Requirements for Test Items	6.2.5; Resistance to Dropping	6.2.3: Ambient for >60 minutes	Section 5.5; <i>Cast Standard for Police Chemical Irritant Sprays: CS and PAVA</i>	\$290	3 devices	Critical
	6.2.5.1; Spray Pattern Assessment	6.2.5; Resistance to Dropping	Section 7	\$450	(same devices)	Critical
	6.2.5.2; Generic Requirements	6.2.5; Resistance to Dropping	6.2.1-6.2.2; Checklist (inspection)	\$150	(same devices)	Critical
Requirements for Test Items	6.2.6.1; Spray Pattern Assessment - extreme high temperature operation	24 hr. ± 15 min. - held at high temperature specified by manufacturer	Section 7	\$650	1 device	Critical
	6.2.6.1; Generic Requirements - extreme high temperature operation	24 hr. ± 15 min. - held at high temperature specified by manufacturer	6.2.1-6.2.2; Checklist (inspection)	\$150	(same device)	Critical
Requirements for Test Items	6.2.6.2; Spray Pattern Assessment - extreme low temperature operation	24 hr. ± 15 min. - held at low temperature specified by manufacturer	Section 7	\$650	1 device	Critical
	6.2.6.2; Generic Requirements - extreme low temperature operation	24 hr. ± 15 min. - held at low temperature specified by manufacturer	6.2.1-6.2.2; Checklist (inspection)	\$150	(same device)	Critical
Requirements for Test Items	6.2.7; Declared Nonflammable - spray flammability	None	Section 5.9; <i>Cast Standard for Police Chemical Irritant Sprays: CS and PAVA</i>	\$1,350	3 devices	Critical
	6.2.7.1; Declared Nonflammable - generic requirements	None	6.2.1-6.2.2; Checklist (inspection)	\$150	(same devices)	Critical
Requirements for Test Items	6.2.8; Declared Nonflammable - ESWs flammability	None	Section 8	\$1,350	3 devices	Critical
	6.2.8.1; Declared Nonflammable (ESWs) - generic requirements	None	6.2.1-6.2.2; Checklist (inspection)	\$150	(same devices)	Critical
Requirements for Chemical Formulations (1 test as applicable to certified product)	6.3; Requirements for Batches of OC Spray	Per Standard	Section 9	\$3,300	3 devices	Critical
	6.4; Requirements for Batches of CS Spray	Per Standard	Section 10	\$3,300		
	6.5; Requirements for Batches of Combined OC and CS Spray	Per Standard	Section 11	\$4,500		
A 10% SEI surcharge will be added to all test fees listed above						
Design Evaluation	5.1 through 5.2: declaration of flammability and verification of carcinogenicity and toxicity	None	SEI Evaluation - Checklist (inspection)	\$100	1 copy - declaration email to SEI	Critical
Batch Testing Verification	6.3; 6.4; 6.5; As required	None	Checklist (inspection) - include w/design evaluation	\$0	1 copy - email to SEI	Major A
Documentation Requirements	12.1.1 through 12.1.9	None	Checklist (inspection)	\$50	1 copy - email to SEI	Minor
Label Content	13; Product Label and Package Label Requirements	None	Checklist (inspection)	\$50	1 copy - email insert & photo to SEI	Minor

ATTACHMENT B

Certification Submittal Package

A Certification Submittal Package shall, at a minimum, include an SEI Certification Submittal Form and Product Description for each product model being submitted. Completion of the submittal package serves four primary purposes:

1. The submittal package provides SEI and the SEI Quality Assurance Auditor with a description of new, modified or products to be selected for annual certification.
2. The information provided by the manufacturer in the submittal package confirms to SEI the product design and components.
3. Receipt of the submittal package by the testing laboratory, from SEI, serves as the laboratory's authorization to begin testing the product(s) and allows laboratory personnel to verify that the correct product samples have been received.
4. The return of a signed copy of the submittal form from the testing laboratory provides SEI with a record of the date testing was completed on the product model.

Over the life of the product, subsequent submittal packages shall document that the product model submitted for certification testing is identical to samples **previously** tested, except where Class I model changes have been tested and documented through the submission of additional SEI submittal packages or documented Class II changes have been made. It is therefore necessary that each submittal to SEI include enough product description information to uniquely and unambiguously identify the product model in question.

SEI Certification Submittal Form

Each submittal must be identified on the submittal form as either (1) initial certification, (2) annual recertification, (3) Class I change, or (4) Class II change. Finished product manufacturing facilities (assembly) located at a different address (i.e. suppliers or company-owned factories) shall be identified in Section 3 of the submittal form. The SEI Certification Submittal Form shall be signed by the authorized manufacturer representative within the participating company having the authority to authorize expenditures for testing.

Product Description

The product description information shall be provided to SEI.

A. Description of Major Components

All major components and materials shall be identified and described.

B. Primary Materials

Materials used in the construction of major components and all ingredients contained within the formulation, including the propellant shall be identified. Identification shall include trade names, if applicable. All changes shall be reported to SEI for evaluation and possible action.

C. Manufacturing Locations

All locations in which the product model is manufactured or assembled must be identified on the SEI Certification Submittal Form. If major components are manufactured by another company and purchased by the SEI participants, the name and address of the manufacturing facility and contact name shall be identified.

D. Specification Sheets or Technical Bills of Materials

Product specification sheets or technical bills of materials (BOM) may be included with the SEI Certification Submittal Form in addition to the Components & Materials description checklist to fulfill some or all other requirements noted above. In the case of annual recertification, the appropriate documents (i.e., submittal form and components and materials listing or BOM) shall be prepared prior to the sample selection audit and available to the auditor during the audit for reference and confirmation of product.

E. Confidentiality

All product information received by SEI staff, the SEI Quality Assurance Auditor, or the SEI testing laboratory shall be considered confidential and shall not be released to any third party without written authorization to do so (with the exceptions noted *Section 3: Manufacturer's Agreement* for response to a subpoena, court order or other compulsory process).

Application & Annual Certification Fees

Testing shall be performed annually. When an initial submittal package is submitted to SEI, the Application Fees and Annual Participation Fees (if not already a Participant) are due (*See Section 7: Annual Participation Fees of the SEI Certification Program Manual*). Upon completion of initial testing, Annual Model Certification Fees are due. The following is a schedule of application fees and annual model certification fees that apply to this Law Enforcement Program for 2019:

Model Type	Submittal Type	Application Fee	Annual Certification Fees
Base Model	Initial	\$250	\$405
	Class I Change	\$50	N/A
	Class II Change	\$50	N/A
Variant Model	Initial	\$125	\$130
	Class I Change	\$50	N/A
	Class II Change	\$50	N/A
Accessory Model	Initial	\$125	\$130
	Class I Change	\$50	N/A
	Class II Change	\$50	N/A

ASTM E3187-19, Less Lethal Aerosol Devices Used by Law Enforcement, Corrections, and Other Public Safety Officers

“Model” is the collective term used to identify a group of protective devices of the same basic design and components from a single applicant produced by the same manufacturing and quality assurance procedures that are covered by the same certification. Any characteristic that affects the device’s performance under the limits of the current certification standards constitutes a different model. For purposes of the SEI Certification Program, the above definition of the term “model” uses performance characteristics as the basic criteria.

A. Definition of Model

Characteristics that should affect the model’s ability to meet the performance requirements of the certification standard and therefore require a new model designation:

1. Cannister material composition, or design
2. Ingredients contained within the formulation, including the propellant.

B. Examples of Major Components

1. Cannister materials – include all components
2. Spray Pattern
3. Propellant
4. Formulation
5. Active Ingredients

C. Laboratory Testing Fees/ Attributes & Variables

SEI currently has approved one (1) laboratory that may conduct testing to this standard. The schedule of rates for testing at these laboratories can be found on the SEI website and can be used to estimate the total cost of testing for all the models that are to be certified.