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DEPARTMENT OF LABOR  
Mine Safety and Health Administration

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30 CFR Parts 6, 7, 18, 19, 20, 22, 23, 27, 33, 35, and 36

RIN 1219-AA87

Testing and Evaluation by Independent Laboratories  
and Non-MSHA Product Safety Standards

**AGENCY:** Mine Safety and Health Administration (MSHA), Department of  
Labor.

**ACTION:** Final rule.

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[Federal Register: June 17, 2003 (Volume 68, Number 116)]  
[Rules and Regulations]  
[Page 36407-36423]





# Three Parts to the Rule

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- Independent Laboratories
- Non-MSHA Product Safety Standards
- Quality Assurance Requirements



# What is an Independent Laboratory?

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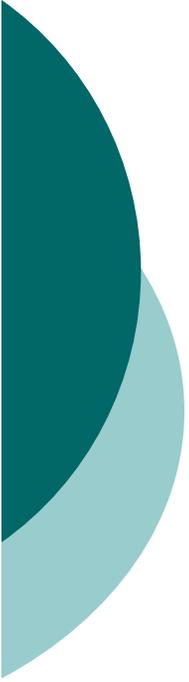
*A laboratory that:*

*(1) has been recognized by a laboratory accrediting organization to test and evaluate products to a [related] **product safety standard**, and*

*(2) is free from commercial, financial, and other pressures that may influence the results of the testing and evaluation process.*

—30CFR §6.2





# What is a product safety standard?

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*A document, or group of documents, that specifies the requirements for the testing and evaluation of a product for use in explosive gas and dust atmospheres, and, when appropriate, includes documents addressing the flammability properties of products.*

—30CFR §6.2



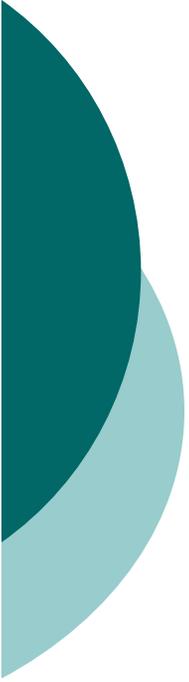


# MSHA current product safety standards

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- 30 CFR, Subchapter B— Parts:
  - 15 - Explosives
  - 18 - Electrical machines and accessories
  - 19 - Cap lamps
  - 20 - Flashlights
  - 22 - Portable methane detectors
  - 23 - Telephones and signaling devices
  - 27 - Methane monitoring systems
  - 28 - Fuses
  - 33 - Dust collectors
  - 35 - Flame-resistant hydraulic fluids
  - 36 - Diesel-powered equipment



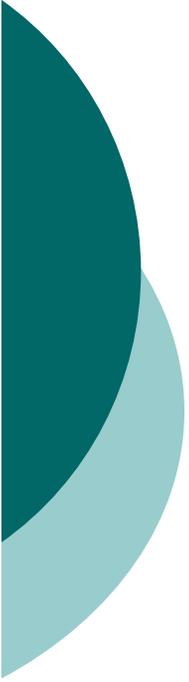


# MSHA current product safety standards

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- 30 CFR Part 7 Subparts--
  - B – Brattice cloth and ventilation tubing
  - C – Battery assemblies
  - D – Multiple-shot blasting units
  - E – Diesel engines
  - F – Diesel power packages
  - J – Electric motors
  - K – Electric cables and splice kits



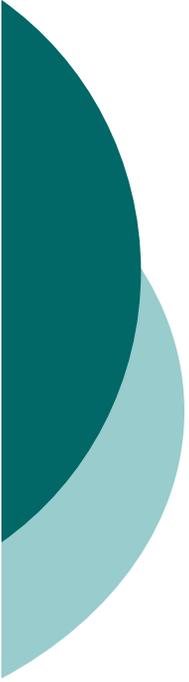


# Part 7 Product Safety Standards

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- No subjective analysis
- Test by manufacturer or 3<sup>rd</sup> party
- MSHA controls:
  - Witness initial tests
  - Evaluation of test results
  - QA post-approval product audits
- Independent lab not required
- Equivalent standards





## Summary - Product Safety Standards

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- MSHA's current product safety standards are codified in 30CFR
- Policies and procedures supplement each regulation
- Part 7 products do not require an independent lab
- After a non-MSHA product safety standard has been determined to be equivalent to MSHA's, that standard (with deviations) also becomes an alternative MSHA product safety standard





Any questions concerning MSHA's  
product safety standards?

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# What is an Independent Laboratory?

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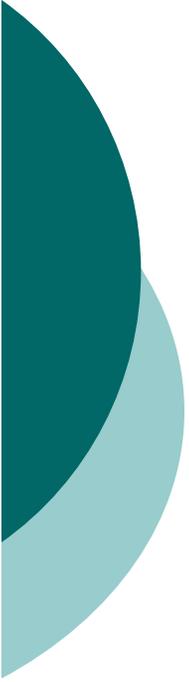
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# Laboratory Accrediting Organizations

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- OSHA's NRTL Program
- IEC Ex Scheme
- A2LA
- NIST's NVLAP
- ANSI's ACP





# OSHA's NRTL Program

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- Requirements (29 CFR 1910.7)
  - Independent
    - Ownership
    - Conflict of Interest Policy
  - Technical Capability
    - Proper test equipment and facilities
    - Trained staff
    - Written testing procedures
    - Calibration and quality control programs





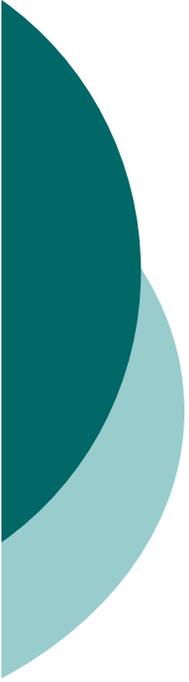
# OSHA's NRTL Program

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- Related Product Safety Standards
  - UL 674 Electric Motors
  - UL 783 Flashlights
  - UL 913, FMRC 3610 Intrinsic Safety
  - UL 1203 Explosion Proof

[www.osha.gov/dts/otpca/nrtl/allstds](http://www.osha.gov/dts/otpca/nrtl/allstds)





# OSHA's NRTL Program

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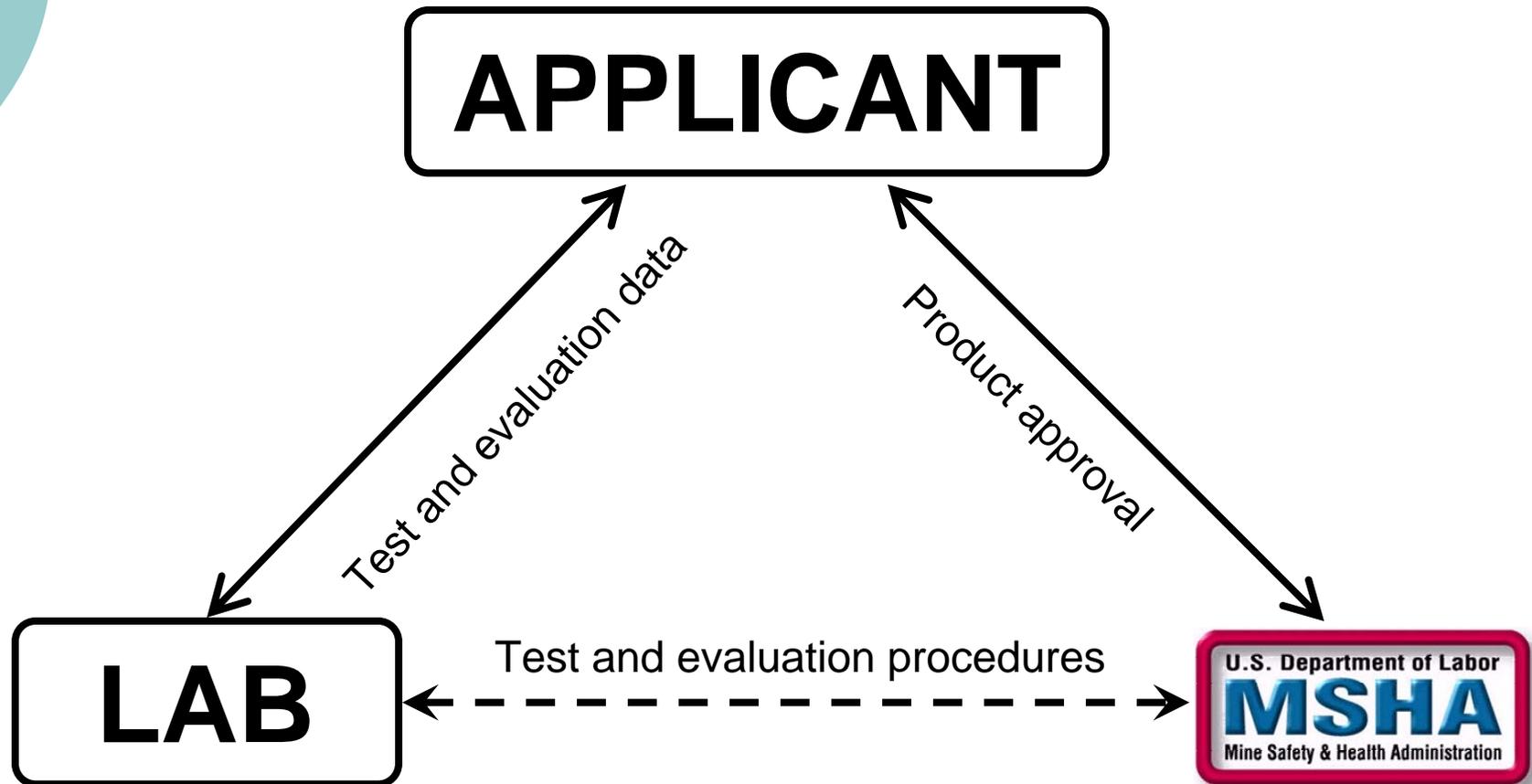
- MET Laboratories, Inc
- Underwriters Laboratories Inc
- FM Global Technologies LLC
- SGS U. S. Testing Company, Inc.
- Canadian Standards Association
- Intertek Testing Services NA, Inc

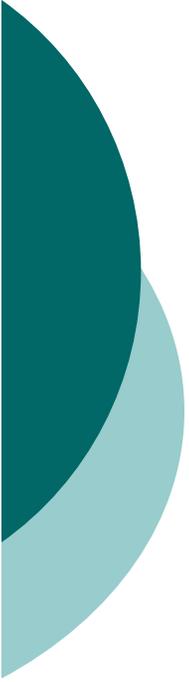
[www.osha.gov/dts/otpca/nrtl/nrtllist](http://www.osha.gov/dts/otpca/nrtl/nrtllist)



# Part 6 Approval Triangle

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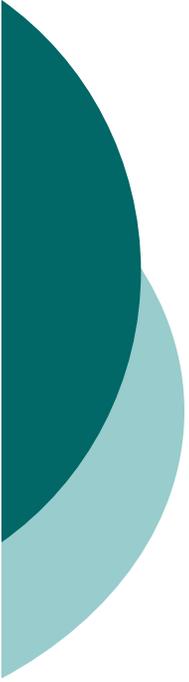
# Laboratory's Responsibilities

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Provide the Applicant:

- Evidence of its independence
- Scope of its accreditation
- Assurance that it performed or witnessed all testing
- A complete and credible test report





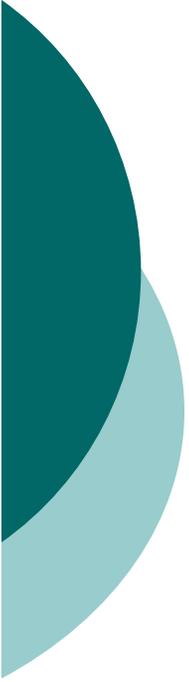
# Laboratory's Responsibilities

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A test report that:

- Identifies the applicable requirements
- Provides a technical explanation of how the product complies with each requirement
- Contains valid test data
- Identifies and specifies the critical components and features of the product
- Lists all documents used in the evaluation





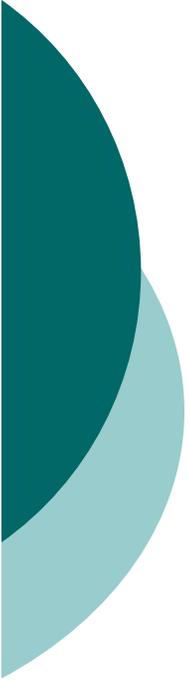
# Applicant's Responsibilities

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## Provide to MSHA:

- Evidence of the laboratory's independence
- Scope of laboratory's accreditation
- Test report including test data
- Drawings submitted to the laboratory
- Documentation required by 30CFR
- Representative samples of the product
- Components as necessary for test





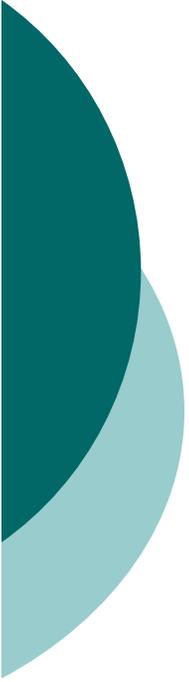
# MSHA's Responsibilities

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Provide to the mining industry:

- Products that will not cause a fire or explosion in an underground mine
- "So that each and every miner may return home safe and healthy after their work shift."



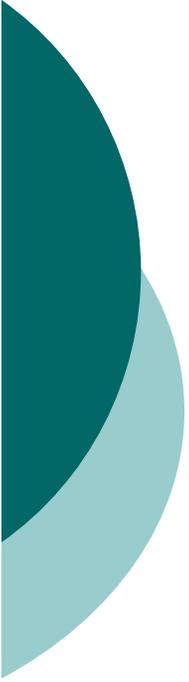


## You may be an Independent Lab if you-

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- Have been accredited to test to a product safety standard that is similar to MSHA's
- Are free from pressures that may influence the results of your testing and evaluation process
- Produce test reports that are complete and are technically credible





# Questions regarding what is an Independent Laboratory?

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