

1.0 PURPOSE

This document provides the Mine Safety and Health Administration's (MSHA) Standard Application Procedure (SAP) for the flame testing, evaluation and acceptance of flame-resistant conveyor belts in accordance with 30 CFR, Part 14.

2.0 SCOPE

The Code of Federal Regulations 30 CFR, Part 14 establishes flame resistance requirements for MSHA approval of conveyor belt for use in underground coal mines. This document describes procedures for applying to MSHA for approval, or extension of approval, of flame-resistant conveyor belts.

3.0 REFERENCES

- 3.1. Approval and Certification Center (A&CC) Cancellation Policy (APOL 1009).
- 3.2. Code of Federal Regulations (30CFR), Part 14

4.0 DEFINITIONS

- 4.1. Applicant: An individual or organization that manufactures or controls the production of a conveyor belt and applies to MSHA for approval of conveyor belt for use in underground coal mines.
- 4.2. Approval: A document issued by MSHA, which states that a conveyor belt has met the requirements of Part 14 and which authorizes an approval marking identifying the conveyor belt as approved.
- 4.3. BELT testing: The Belt Evaluation Laboratory Test (BELT) is a laboratory-scale flame resistance test designed to evaluate the flame resistance of conveyor belt. The BELT is described under the technical requirements of 30CFR§14.
- 4.4. Chemical name: The name by which each ingredient in a formulation can be specified. Organic ingredients should be named according to the current rules of the International Union of Pure and Applied Chemistry. Inorganic ingredients should be named according to the Chemical Abstract of the American Chemical Society.

- 4.5. Extension of approval: A document issued by MSHA, which states that a change to a product previously approved by MSHA meets the requirements of Part 14 and which authorizes the continued use of the approval marking after the appropriate extension number has been added.
- 4.6. Flame-retardant ingredient: A material that inhibits ignition or flame propagation.
- 4.7. Flammable ingredient: A material that is capable of combustion.
- 4.8. Inert ingredient: A material that does not contribute to combustion.
- 4.9. Preauthorization notice: A statement by the applicant authorizing MSHA to expend a stated amount of money in evaluating / testing the applicant's product prior to the preparation and issuance of the MSHA fee estimate.
- 4.10. Similar conveyor belt: A conveyor belt that shares the same cover compound, general carcass construction, and fabric type as another approved conveyor belt.

5.0 APPLICATION PROCEDURE

- 5.1. It is recommended that applicants contact the MSHA Approval and Certification Center to discuss acceptance and testing requirements prior to submitting an application. The telephone number for the Approval and Certification Center is 304-547-0400. Applications can be submitted by one of the following methods:
 - 5.1.1. An application requesting approval of flame-resistant conveyor belt can be sent to the following address:

Chief

Approval and Certification Center

Mine Safety and Health Administration

765 Technology Drive

Triadelphia, West Virginia 26059

- 5.1.2. The Approval and Certification Center can accept approval applications submitted through email. Most common electronic formats (e.g., .doc, .xls, .tif, .pdf, .txt, .dwg) are supported. Application letters, specifications, drawings, and other supporting documentation should be sent to zzMSHA-IPSO@dol.gov.
- 5.1.3. Applications for approval may be filed online at <http://www.msha.gov>.
- 5.1.4. Applications for approval may be faxed to: Chief, Mine Safety and Health Administration Approval and Certification Center at 304-547-2044.
- 5.2. An application must address either a single specific construction, or a construction consisting of the same cover compound and carcass construction varying only by the number of plies and fabric weight. If approval of variable-ply construction is requested, the minimum and maximum number of plies both with thinnest-specified cover thickness and heaviest-specified fabric weight will be tested.
- 5.3. **Approval Application:** An applicant may refer to Attachment A of this document. Applications for MSHA approval of conveyor belt must contain the following information:
- 5.3.1. An application ID number: a unique six, or fewer, digit numeric code number assigned by the applicant.
- 5.3.2. The company name, address, and telephone number of the applicant's representative responsible for answering any questions regarding the application. Also, the applicant may provide an email address for contacting their representative.
- 5.3.3. The applicant must state that the company manufactures or controls the production of the conveyor belt. If the applicant does not manufacture the product, the applicant must briefly describe how the applicant exercises control over production.
- 5.3.4. The applicant must state that if granted an approval the finished conveyor belt will meet the Quality Assurance requirements described in 30CFR§14.8.

- 5.3.5. The application must be signed by an authorized representative of the company.
- 5.3.6. A technical description of the conveyor belt, which includes:
- 5.3.6.1. Trade name or identification number;
 - 5.3.6.2. Cover compound type and designation number;
 - 5.3.6.3. Belt thickness and thickness of top and bottom covers;
 - 5.3.6.4. Presence and type of skim coat;
 - 5.3.6.5. Presence and type of friction coat;
 - 5.3.6.6. Carcass construction (number of plies, solid woven, etc.);
 - 5.3.6.7. Carcass fabric by textile type and weight (ounces per square yard);
 - 5.3.6.8. Presence and type of breaker or floated ply; and
 - 5.3.6.9. The number, type, and size of cords and fabric for metal cord belts.
- 5.3.7. **Evaluation without testing:** Belts similar to those previously approved under Part 14 may be considered for evaluation without BELT testing if the following information is provided in the application:
- 5.3.7.1. Formulation of the compounds in the conveyor belt by one of two methods:
 - a. Specifying each ingredient by its chemical name along with its percentage (by weight) and tolerance or percentage range; or
 - b. Specifying each flame-retardant ingredient by its chemical or generic name with its percentage and tolerance or percentage range or its minimum percent. List each flammable ingredient and inert ingredient by chemical, generic, or trade name along with the total percentage of all flammable and inert ingredients.
 - 5.3.7.2. Identification of any similar, approved conveyor belt for which the applicant already holds an approval, and the formulation specifications for the approved belt, if the formulation has not previously been

submitted to the Agency. As part of that application the applicant will provide the MSHA assigned approval number of the conveyor belt that most closely resembles the new one; and an explanation of any changes from the existing approval.

5.3.7.3. An applicant may refer to Attachment B of this document.

5.3.8. **Extension of approval:** Any change in an approved conveyor belt from the documentation on file at MSHA that affects the flame resistance of an approved belt must be submitted for approval prior to implementing the change. Each application for an extension of approval must include:

5.3.8.1. The MSHA-assigned approval number for the conveyor belt for which the extension is sought;

5.3.8.2. A description of the proposed change to the conveyor belt; and

5.3.8.3. The name, address, and telephone number of the applicant's representative responsible for answering any questions regarding the application. An applicant may refer to Attachment B of this document.

5.3.9. Flame testing

5.3.9.1. If the applicant believes that flame testing is not required, a statement explaining the rationale must be included in the application.

5.3.9.2. Upon request by MSHA, the applicant must submit 3 precut, unrolled, flat conveyor belt samples for flame testing. Each sample must be $60 \pm 1/4$ inches long by $9 \pm 1/8$ inches wide.

6.0 APPLICATION PROCESSING

6.1. Upon receipt of a complete application, MSHA will prepare an estimate for the cost of application processing (a "CAP" letter) and send it to the applicant. Or, the applicant may submit a preauthorization notice with their application to eliminate the "CAP" letter. The preauthorization notice permits immediate evaluation work to begin. Check with MSHA personnel for an estimate of cost.

TITLE: Application Procedure for Approval of Flame-Resistant Conveyor Belt, 30 CFR, Part 14

MSHA Mine Safety and Health Administration, Approval & Certification Center

- 6.2. In constructing an estimate, MSHA projects the time necessary to evaluate the product. The applicant would be charged a lesser amount if the actual time expended is less than estimated.
- 6.3. Once the applicant authorizes MSHA to begin the evaluation, MSHA will determine if testing, additional information, samples, or material is required to evaluate an application.
- 6.4. If an applicant chooses to cancel, MSHA will charge fees for work performed prior to the cancellation.
- 6.5. After completing the evaluation, MSHA will issue an approval or provide reasons for denying approval. The approval will authorize an approval marking for the product.

Attachment B Application Form – Extension of Approval for Conveyor Belt
Approved under 30CFR§14 or Evaluation of Conveyor Belt without Testing
MSHA A&CC

Company _____ Application Number _____

Address _____

Representative _____ Telephone _____

Check one: This is an application for extension of approved conveyor belt.

This is an application for evaluation of belt without testing.

MSHA approval number of the belt that most closely resembles the belt submitted for
evaluation: _____.

Description or explanation of changes from the existing approval:

Formulation - For evaluation of belt without testing, provide formulation for each
compound used in construction of the belt by one of two methods:

Check one: a. Specify each ingredient by its chemical name along with its
percentage (by weight) and tolerance or percentage range.

b. Specify each flame-retardant ingredient by its chemical or generic
name with its percentage and tolerance or percentage range or its
minimum percent. List each flammable ingredient and each inert
ingredient by chemical, generic, or trade name along with the total
percentage of all flammable and inert ingredients.

Attach as many sheets as necessary.