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 belts used 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. Company assigned application code number: A unique six digit number assigned by the applicant that is used for the tracking of the application paperwork.

4.4. 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.

4.5. 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.

4.6. 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.

4.7. Flame-retardant ingredient: A material that inhibits ignition or flame propagation.

4.8. Flammable ingredient: A material that is capable of combustion.

4.9. Inert ingredient: A material that does not contribute to combustion.

4.10. 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.

4.11. 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 Quality Assurance and Materials Testing Division at 304-547-0400 to discuss approval and testing requirements prior to submitting an application.

5.2. An application requesting approval or extension of flame-resistant conveyor belt can be sent to the following address:

MSHA, Approval and Certification Center
Attention: IPSO
765 Technology Drive
Triadelphia, West Virginia 26059

a. FAX to: 304-547-0400

b. Email Submittals:

Application letters, specifications, drawings, and other supporting documentation should be sent to zzMSHA-IPSO@DOL.gov

c. FTP Submittals:

Application letters and supporting documentation can be placed on the MSHA FTP server, mfgr.msha.gov. Please call the Information Processing Services Office (IPSO) at 304-547-0400 to establish your user account.

5.3. 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 the heaviest-specified fabric weight will be tested.

5.3.1. Each application for approval of a product must be in the English Language and include the following information on the attached application form (Attachment 1A, Item 1).

a. Company name
b. Address
c. Telephone and FAX number
d. Name of company representative

5.3.2. An application ID number: a unique six, or fewer, digit numeric code number assigned by the applicant (Attachment 1A, Item 2).

5.3.3. The applicant must state that the company manufacturers or controls the production of the conveyor belt (Attachment 1A, Item 3a).

5.3.3.1. If the applicant does not manufacture the product, the applicant must provide the product manufacturer's (name & address) and briefly describe how the applicant exercises control over production (Attachment 1A, Item 3b & 3c).

5.3.4. The applicant may announce objections to the presence of outside observers during MSHA's testing of the belt samples submitted by the

applicant. If the applicant objects to outside observers, the applicant should describe the basis for those objections (Attachment 1A, Item 4).

5.3.5. Provide a technical description of the conveyor belt, which includes the following:

5.3.5.1. Trade name or identification number (Attachment 1A, Item 5);

5.3.5.2. Cover compound type and designation number (Attachment 1A, Item 6);

5.3.5.3. Belt thickness and thickness of top and bottom covers (Attachment 1A, Item 7);

5.3.5.4. Presence and type of skim coat (Attachment 1A, Item 8);

5.3.5.5. Presence and type of friction coat ; (Attachment 1B, Item 9);

5.3.5.6. Carcass construction: number of plies, solid woven, etc. (Attachment 1B, Item 10);

5.3.5.7. Carcass fabric by textile type for warp & weft and weight (ounces per square yard) (Attachment 1B, Item 11a & 11b);

5.3.5.8. Presence and type of breaker or floated ply (Attachment 1B, Item 12a); and

5.3.5.9. Provide the number, type, and size of cords, and fabric for metal cord belts (Attachment 1B, Item 12b).

5.3.6. For evaluation of a belt without testing, provide the formulation for each compound used in the construction of the belt by one on the following two methods (Attachment 1B, Item 13):

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.

5.3.6.1. If this application is similar to any previously approved conveyor (construction and formulation) 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 (Attachment 1B, Item 14a & 14b).

5.3.7. Upon request by MSHA, the applicant must submit at least 3 precut, unrolled, flat conveyor belt samples for flame testing. Each sample must be 60 ± 1⁄4 inches long by 9 ± 1⁄8 inches wide (Attachment 1B, Item 15).

5.3.8. The applicant must sign a statement that certifies if granted an approval, the finished conveyor belt will meet the Quality Assurance requirements described in 30CFR§14.8 (Attachment 1C, Item 16).

5.4. Extensions of Approval

5.4.1. 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:

5.4.2. Each application for approval of a product must be in the English Language and include the following information on the attached application form (Attachment 2A, Item 1).

a. Company name
b. Address
c. Telephone and FAX number
d. Name of company representative

5.4.3. An application ID number: A unique six, or fewer, digit numeric code number assigned by the applicant (Attachment 2A, Item 2).

5.4.4. Identify if this application is for evaluation of a belt without testing (Attachment 2A, Item 3).

5.4.5. Provide the MSHA-assigned approval number for the conveyor belt for which the extension is sought (Attachment 2A, Item 4).

5.4.6. A description of the proposed change to the conveyor belt (Attachment 2A, Item 5).

5.4.7. For evaluation of a belt without testing, provide the formulation for each compound used in the construction of the belt by one on the following two methods (Attachment 2A, Item 6):

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.

5.4.8. Upon request by MSHA, the applicant must submit at least 3 precut, unrolled, flat conveyor belt samples for flame testing. Each sample must be 60 ± 1⁄4 inches long by 9 ± 1⁄8 inches wide (Attachment 2A, Item 7).

5.4.9. If the applicant believes that flame testing is not required, a statement explaining the rationale must be included in the application (Attachment 2B, Item 8).

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.

6.2. In developing an estimate, MSHA projects the time necessary to evaluate the product. The applicant will 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 1A

Application Form - Approval of Conveyor Belt under 30CFR§14
MSHA A&CC

1. Company_____ Application Number_____
   Address_____
   Phone No. (Area Code) _____ FAX No. _____
   Company Representative _____

2. Company Identification Code Number: _____

3a. Check one: This company _____ manufactures the conveyor belt.
   This company _____ controls the production of the conveyor belt
   (Provide information to 3b and 3c).

3b. Provide the name and address of the company that manufactures the product.
   Company name: _____
   Company address: _____
   _____

3c. Describe how the applicant exercises control over the products production.
   _____
   _____
   _____
   _____

4. Does the applicant have any objections to the presence of outside observers during MSHA testing of the belt(s) submitted? Yes ___ No ___
   If so, what are the bases for those objections? _____
   _____
   _____
   _____

5. Trade name and/or ID# of the product: _____

6. Cover compound type: _____ Designation No: _____

7. Belt thickness: _____ Carry (Top) Cover: _____ Bottom Cover: _____

8. Skim coat: Yes ___ No ___ if Yes, type & compound #: _____

Attachment 1B

9. Friction coat: Yes ___ No ___ if Yes, type & compound #: _____

10. Carcass construction: _____ No. of Plies: _____
Solid or woven etc. _____

11a. Carcass fabric type: Warp _____ Weft (fill) _____ Binder: _____

11b. Carcass fabric weight: _____oz. /sq. yd; Fabric Treatment: _____

12a. Breaker or floated ply: Yes ___ No ___; Type_____

12b. Metal cord belts: Number of cords: _____
Type and size of cords: _____

13. Method A ____ Method B ____ is used (in the table below) to describe the formulation of each compound used in the construction of the belt.

Formulation Ingredient	% by Weight	Tolerance (+ or - Percent)

14a. The MSHA assigned approval number of the conveyor belt that most closely resembles the new identified with this application is _____.

14b. Provide explanation of any changes from the existing approval.

_____

_____

_____

_____

15. The following samples have been sent for testing:

_____

_____

_____

_____

Attachment 1C

16. If granted an approval, the applicant assures that the MSHA approved conveyor belts produced will meet the Quality Assurance requirements described in 30CFR§14.8.

    Authorized company representative: (name) _____

    Date: _____ Signature: _____

    An applicant may attach formulations of belt compounds as per 30CFR§14.4 (c).

Attachment 2A

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

1. Company_____ Application Number_____
   Address_____
   Phone No. (Area Code) _____ FAX No. _____
   Company Representative _____

2. Company Identification Code Number: _____

3. Is this application is for evaluation of a belt without testing: Yes ___ No___.

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

5. Description or explanation of changes from the existing approval:

   _____

   _____

   _____

6. Method A ____ Method B ____ is used (in the table below) to describe the formulation of each compound used in the construction of the belt.

Formulation Ingredient	% by Weight	Tolerance (+ or - Percent)

7. The following samples have been sent for testing:

   _____

   _____

   _____

Attachment 2B

8. Statement explaining why the applicant believes that flame testing is not required:

_____

_____

_____

_____