

1.0 PURPOSE

This document establishes a Mine Safety and Health Administration's (MSHA) Standard Application Procedure (SAP) for the Acceptance of Hose Conduit, Fire Hose Liner and Fire Suppression Hose Cover under 30 CFR, Part 18.

2.0 SCOPE

These procedures apply to all applications for acceptances of Hose Conduit, Fire Hose Liner and Fire Suppression Hose Cover under 30 CFR, Part 18.

3.0 REFERENCES

- 3.1. Approval and Certification Center (A&CC) Cancellation Policy (APOL 1009).
- 3.2. Code of Federal Regulations (30CFR) Parts 18. 65, 75.1100-1(f)(1) and 75.1107-13(c).

4.0 DEFINITIONS

- 4.1. Fire Hose Liner: The innermost tube of a fire hose.
- 4.2. Fire suppression Hose: A hose used on a fire suppression device.
- 4.3. Hose Conduit: A protective hose used over electrical cables only.

5.0 APPLICATION PROCEDURE

- 5.1. It is recommended that applicants contact the Approval and Certification Center to discuss approval and testing requirements prior to submitting an application.

An application requesting an acceptance should be sent to the following address:

Chief
Approval and Certification Center
Mine Safety and Health Administration
RR #1 Box 251, Industrial Park Road
Triadelphia, West Virginia 26059

5.2. Provide an application number:

Each application should be identified by a code number assigned by the applicant. The code number shall be 6 numeric digits or less and be placed on the initial application and on all samples, subsequent correspondence, documents and drawings.

5.3. Identify and describe the product:

A form is attached which is recommended for use in describing the product being submitted. In addition to the form, any special information should be provided.

5.4. Provide information on the compounds in the product. Each ingredient must be specified by its chemical or generic name along with its percentage (weight) and tolerance. 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. A prepolymer formulation which has been registered with MSHA may be identified by furnishing the MSHA assigned ID number. However, each additional ingredient the manufacturer adds to the chemical or generic name, along with its percentage (weight) and tolerance must be identified by chemical or generic name, along with its percentage (weight) and tolerance. Use one of the methods listed below (5.4.1, 5.4.2 or 5.4.3).

5.4.1. Specify each ingredient by its chemical name along with its percentage (weight) and tolerance of percentage range 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.

5.4.2. Specify each fire retardant ingredient by its chemical or generic name with its percentage and tolerance or percentage range or its minimum percent. List each flammable ingredient by chemical, generic, or trade name along with the TOTAL percentage of all flammable ingredients. List each inert ingredient by chemical, generic, or trade name along with the TOTAL percentage of all inert ingredients. In addition, the product formulation with percentages and tolerances should be kept on file by the applicant. The formulation shall be available to MSHA at the applicant's premises

upon request should a product be involved in a mine accident, incident, or quality assurances check.

- 5.4.3. Specify each fire retardant ingredient by its chemical or generic name with its percentage and tolerance or percentage range or its minimum percent. List all other ingredients. A flame test quality assurance program subject to acceptance by the Approval and Certification Center, Quality Assurance and Materials Testing Division should also be provided to maintain the accepted flame resistance level of the product. The flame test program should be maintained and documented as long as the product is made and acceptance is in effect. The flame test records should be available for examination by MSHA personnel. In addition, the product formulation with percentages and tolerances should be available to MSHA at the applicant's premises upon request should a product be involved in a mine accident, incident, or quality assurance check.

5.5. Changes in Composition of Accepted Products and Extensions:

MSHA's Approval and Certification Center, Quality Assurance and Materials Testing Division, may request specific formulation information (name of ingredient(s) with percentage and tolerances) and/or test data, if an applicant is requesting a change in composition of an accepted product or requesting an extension. The request by MSHA will be to determine if the change increases the flammability or toxicity of the product.

5.6. Flammability Testing: Hose samples to be tested by MSHA.

5.6.1. For Hose Conduit:

Submit 6 samples ½" wide by 6" long of the complete wall section. Also submit a 3 foot long complete hose section.

5.6.2. For Fire Suppression Hose:

Submit 6 samples ½" wide by 6" long of the outer jacket/cover.

5.6.3. For Fire Hose:

Submit 6 samples ½" wide by 6" long of the inner tube liner.

5.7. Provide the following toxicity information:

- 5.7.1. A signed statement (see Attachment 1 of this Procedure).

5.7.2. The applicant should provide information on the toxicity of the finished product including inhalation, ingestion, skin, eye, sensitization, carcinogenic hazards. A toxic product is a finished product or material capable of causing bodily harm to an average individual by chemical action. The toxicity hazard should be under "normal use conditions."

5.8. Branding Information:

5.8.1. Hose and hose conduit submitted under 30 CFR 18.65 and accepted by MSHA as flame-resistant shall be marked as follows: Impressed letters, raised letters on depressed background, or printed letters with the words "Flame-Resistant. USMSHA No.18-HCAYYXXXX-0" at intervals not exceeding 3 feet. This number will be assigned to the manufacturer after the sample has passed the tests. For all hose and hose conduit larger than 3/8 inch I.D., the letters and numbers shall be at least 1/4 inch high. For hose 3/8 inch I.D. and under, the letters and number shall be at least 1/4 inch high. Multiple use hose submitted under this application procedure and the Interim Criteria shall be marked "Flame-Resistant, USMSHA No. 18-FSAYYXXXX-0". This number will be assigned to the manufacturer by MSHA.

5.8.2. The "A" in the approval number designates the applicable standard; "YY" designates the year of the standard revision, the "XXXX" designates the four digit approval number, and "0" designates the extension number to be assigned by MSHA following approval of the conduit hose, fire suppression hose or fire hose liner.

5.8.3. When acceptance is granted, the applicant must provide MSHA with a sample showing the complete brand.

5.9. Provide information on the quality assurance program.

Applications should provide the details with which the applicant intends to maintain compliance with criteria. MSHA will indicate acceptance of the quality assurance program once for each manufacturing plant but reserves the right to monitor in-plant processes, review records, and interview employees with respect to the plan. Any changes affecting flammability or toxicity in the quality assurance program will require re-approvals by MSHA. The quality assurance program shall include:

**TITLE: Application Procedure for Acceptance of Conduit Hose, Fire Suppression
Hose Cover and Fire Hose Liner for use in Underground Coal Mines**

- 5.9.1. Procurement procedures for the components of the product.
- 5.9.2. Manufacturing practices to maintain the formulation.
- 5.9.3. Procedures for record keeping.
- 5.9.4. If option 5.4.3 above is used for the Formulation, details of a flame test control program must be included as part of a quality assurance program.

APPLICATION FORM

Date _____

Product Description _____

Manufacturer _____

Address _____

Telephone Number _____, e-mail address _____

Application Number _____, New or Extension Request ____ Ext. ____

End Use Designation:

Fire Suppression _____ Fire _____ Hose Conduit _____

Other (specify) _____

For FIRE HOSE complete only following:

Tube (Inner Liner): Compound Designation No. _____ Thickness Range _____

For FIRE SUPPRESSION HOSE AND OTHER HOSE complete only the following:

Cover: Compound Designation No. _____ Thickness Range _____

For HOSE CONDUIT complete all the following information:

Cover: Compound Designation No. _____ Thickness Range _____

Hose Conduit Wall Gauge (3/16/" minimum): _____

Reinforcement:

Type:

____ Braided ____ Wrapped Fabric ____ Spiral other (specify) _____

Material:

_____ Textile _____ Wire

Fabric Reinforcement Details:

Textile(s) Warp _____ Weft (fill _____

Fabric Weight (oz./sq. yd. - Max.) _____

Fabric Treatment _____

No. of Plies _____ Adhesion Gum Designation No(s). _____

Braided, Spiral, or Other Reinforcement Details:

Material Type _____

Weight (yds/lb.; ft./lb.) _____

No. of Plies _____ Adhesion Gum Designation No(s) _____

The material contained in this specification is considered to be confidential commercial information and/or trade secrets as covered by federal law (5 USC 552(b)(4)) and is exempt from disclosure requirements of the Freedom of Information Act (5 USC 552).

Attachment 1

TOXICITY AND QUALITY ASSURANCE STATEMENT

I certify that the ventilation control _____
(Trade Name)

in its final form presents no known toxic hazard under normal use conditions.
Furthermore, I certify, that we will assure product compliance for this product with
respect to all specifications submitted to MSHA, A&CC.

Signed _____
(Authorized Company Official)

Title _____

Date _____