

1.0 PURPOSE

This document establishes the Mine Safety and Health Administration's (MSHA) Standard Application Procedure (SAP) for the acceptance of Hose Conduit, Fire Hose Liner and Fire Suppression Hose 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 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. Hose conduit is not to be split.

5.0 APPLICATION PROCEDURE

- 5.1. It is recommended that applicants contact the Quality Assurance & Materials Safety Division at 304-547-0400 to discuss acceptance and testing requirements prior to submitting an application.
- 5.2. The application requesting an acceptance or extension of acceptance should be sent to the following address:

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

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

MSHA Mine Safety and Health Administration, Approval & Certification Center

- a. FAX to: 304-547-2084
 - b. Email Submittals:
 - c. Application letters, specifications, drawings and other supporting documentation should be sent to zzMSHA-IPSO@DOL.gov
 - d. FTP Submittals:
 - e. 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.
- 5.2.1. Each application for acceptance of a product must be in the English Language and include the following information on the attached application form (Attachment 1, Item 1).
- a. Company name
 - b. Address
 - c. Telephone & FAX number of company representative
 - d. Company representative name
- 5.2.2. A 6 digit or less numeric code (Application Code) assigned by the applicant (Attachment 1, Item 2).
- 5.2.3. Identify if the application request is for a new acceptance or an extension of an existing acceptance number (Attachment 1, Item 3).
- 5.2.4. Identify and describe the product (as applicable) on Attachment 1, Item 4. Additional information and any special information should be attached.
- 5.2.5. 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 (Attachment 2, Item 5). 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

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

MSHA Mine Safety and Health Administration, Approval & Certification Center

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 in 5.2.5.1, 5.2.5.2 or 5.2.5.3 (Attachment 1, Item 5).

- 5.2.5.1. Specify each ingredient by its chemical name along with its percentage (weight) and tolerance or 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.
- 5.2.5.2. 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 assurance check.
- 5.2.5.3. 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.

5.2.6. Quality Assurance:

Provide information on the applicant's quality assurance program regarding the procedures used to maintain compliance with criteria. MSHA 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-acceptance by MSHA. The quality assurance program shall include (Attachment 2, Item 6):

- a. Procurement procedures for the components of the product.
- b. Manufacturing practices to maintain the formulation.
- c. Procedures for record keeping.
- d. If option 5.2.5.3 above is used for the formulation, details of a flame test control program must be included as part of a quality assurance program.

5.2.7. Flammability Testing: Hose samples to be tested by MSHA (Attachment 2, Item 7).

a. For Hose Conduit:

Submit 6 samples ½" wide by 6" long of the complete wall section. In addition, submit a 3-foot long complete hose section.

b. For Fire Suppression Hose:

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

c. For Fire Hose Liner:

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

5.2.8. Provide information on the toxicity of the finished product including an OSHA Materials Safety Data Sheet in accordance with 29 CFR 1910.1200.

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

MSHA Mine Safety and Health Administration, Approval & Certification Center

This information should include the toxicity of the finished product including inhalation, ingestion, skin, eye sensitization, and 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" (Attachment 2, Item 8).

5.2.9. 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. MSHA will determine if the change increases the flammability or toxicity of the product.

5.2.10. Branding Information:

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.

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

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

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

MSHA Mine Safety and Health Administration, Approval & Certification Center

- 5.3. The material contained in your application 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

**Application for Acceptance
of Conduit Hose, Fire Suppression Hose, and Fire Hose Liner**

Date _____

1. Company Name: _____
Address: _____

Telephone No. (Area Code) _____ FAX No. _____
Company Representative: _____

2. Company Identification Code Number: _____

3. Application is for:
a. New MSHA Acceptance Number: Yes ___ No ___
b. Extension of an existing Acceptance: _____
(Insert Acceptance No.)

4. a. End Use Designation:
Fire Suppression _____ Fire _____ Hose Conduit _____
Other (specify) _____

b. For FIRE HOSE LINER complete only the following:
Tube (Inner Liner): Compound Designation No. _____
Thickness Range _____

c. For FIRE SUPPRESSION HOSE AND OTHER HOSE complete only the following:
Cover: Compound Designation No. _____
Thickness Range _____

d. For HOSE CONDUIT complete the following information (d through g):
Cover: Compound Designation No. _____
Thickness Range _____
Hose Conduit Wall Gauge (3/16" minimum) _____

e. Reinforcement Type:
Braided _____ Wrapped Fabric _____ Spiral/other (specify) _____

Material:
Textile _____ Wire _____

f. Fabric Reinforcement Details:
Textile(s) Warp _____ Weft (fill) _____
Fabric Weight (oz./sq. yd. - Max.) _____
Fabric Treatment _____
No. of Plies: _____ Adhesion Gum Designation No(s). _____

g. Braided, Spiral, or Other Reinforcement Details:
Material Type _____
Weight (yd./lb.; ft./lb.) _____
No. of Plies: _____ Adhesion Gum Designation No(s): _____

Attachment 2

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

6. The following Quality Assurance documentation is attached:

- a. Procurement procedures for the components or ingredients of the product,
Yes ___ No ___ (if No, provide explanation).
- b. Manufacturing practices to maintain the formulation,
Yes ___ No ___ (if No, provide explanation).
- c. Procedures for record keeping, such as inspection records, sampling plan, test results,
etc.
Yes ___ No ___ (if No, provide explanation)
- d. If option 5.2.5.3 above is used for the formulation, details of a flame test control program
must be included as part of a quality assurance program.
Yes ___ No ___ (if No, provide explanation).

7. The following samples were submitted for testing:

- a. For Hose Conduit: Yes ___ No ___
Submit 6 samples 1/2" wide by 6" long of the complete wall section. In addition, submit a
3-foot long complete hose section.
- b. For Fire Suppression Hose: Yes ___ No ___
Submit 6 samples 1/2" wide by 6" long of the outer jacket/cover.
- c. For Fire Hose Liner: Yes ___ No ___
Submit 6 samples 1/2" wide by 6" long of the inner tube liner.

8. Toxicity Certification Statement:

I certify that _____, in its final form does not present a toxicity
(Trade Name)
hazard under normal use conditions. Furthermore, I certify that we will assure product
compliance of this product with respect to all specifications submitted to MSHA, A&CC.

Signed _____ Title _____ Date _____
(Authorized Company Official)