



# HAZARDOUS LOCATIONS SEMINAR

## SEMINAR LOCATION/DATES:

**NORWOOD, MASS., USA**

Dec. 9 – 10, 2024

*(Register on page 2)*

## TO REGISTER:

Email registration sheet to  
FMAJohnston@fmglobal.com

*or*

Fax registration sheet to  
FM Approvals Finance Department  
+1 (1)401 464 4575

*or*

Call FM Approvals  
Finance Department  
+1 (1)800 972 8730  
(toll-free in Canada and the  
United States only)  
or +1 (1)401 415 2991  
(outside North America)

*or*

Mail a copy of registration  
sheet with your payment to:  
FM Approvals LLC  
75 Remittance Drive, Suite 6181  
Chicago, IL 60675-6181 USA

## FOR MORE INFORMATION:

Contact **Josephine Mahnken**  
Senior Business Process Specialist  
FM Approvals  
at +1 (1)781 255 4813

*or*

by email at  
josephine.mahnken@fmaprovals.com

They don't call them "hazardous" for nothing! This information-packed, two-day seminar is an eye-opening opportunity for you to learn more about employing electrical equipment in hazardous locations.

## IF YOU DESIGN, INSTALL OR OPERATE ELECTRICAL EQUIPMENT IN HAZARDOUS LOCATIONS, THIS SEMINAR IS FOR YOU!

Learn to minimize the risk of ignition as you focus on designing and building safer equipment and installations that conform to applicable regulations.

## YOU WILL LEARN:

- How and why hazardous locations are classified
- Protection techniques for classes, divisions and zones worldwide
- National Electrical Code® (NEC®) classifications of combustible dust; ignitable fiber; and flammable gas, liquid and vapor
- Which standards meet your certification needs
- Construction and performance requirements based on protection techniques
- Wiring methods and other installation concerns covered by the NEC®
- How to obtain the certification your products need for access to global markets
- How to cut costs and reduce risk of loss by taking advantage of new protection methods

## REGISTRATION FEE:

**US\$695** per person; FM Approvals and FM Global clients: **US\$595**, save *US\$100*.  
Day 1: 7:30 a.m. – 5 p.m.

Day 2: 7:45 a.m. – 3 p.m.

*Includes refreshments, lunch and valuable seminar materials.*



# HAZARDOUS LOCATIONS SEMINAR

## PLEASE REGISTER ME FOR:

### NORWOOD, MASS., USA

Dec. 9 – 10, 2024

Four Points Sheraton  
1125 Boston Providence Turnpike  
Norwood, Mass. 02062  
Tel: 781 769 7900  
Fax: 781 551 3552  
Web: [fourpointsnorwood.com](http://fourpointsnorwood.com)

Day 1: 7:30 a.m. – 5 p.m.  
Day 2: 7:45 a.m. – 3 p.m.  
Check-In: 3 p.m.  
Check-Out: 12 p.m.  
Room Rates: starting at US\$165 + taxes  
(includes breakfast)

Reservations to be made by attendee.  
Please specify that they are part  
of FM Approvals when making  
reservations, in order to guarantee  
the discounted group rate.

Reservation Number: 781 769 7900  
Email: [lucy.finnerty@hobbsbrook.com](mailto:lucy.finnerty@hobbsbrook.com)

Reservation Deadline:  
Nov. 8, 2024

Cancellation Policy: 24 hours prior  
to arrival date to avoid charges

## FOR MORE INFORMATION:

Contact **Josephine Mahnken**  
Senior Business Process Specialist  
FM Approvals  
at +1 (1)781 255 4813  
or by email at  
[josephine.mahnken@fmapprovals.com](mailto:josephine.mahnken@fmapprovals.com)

Please reserve space for the following individuals at the  
Hazardous Locations Seminar.

I have enclosed/will send the registration fee of US\$695 (US\$595 for  
FM Approvals or FM Global clients) before the seminar.  
(Visa, MasterCard and American Express accepted.)

Seminar location: **Norwood, Mass., USA** Seminar date: **Dec. 9 – 10, 2024**

Name \_\_\_\_\_

Title \_\_\_\_\_

Name \_\_\_\_\_

Title \_\_\_\_\_

Company \_\_\_\_\_

Street/P.O. Box \_\_\_\_\_

City \_\_\_\_\_

State/Province \_\_\_\_\_ ZIP/Postal Code \_\_\_\_\_

Telephone \_\_\_\_\_ Fax \_\_\_\_\_

Email \_\_\_\_\_

For even faster confirmation, please indicate your FM Global account, index no.  
or FM Approvals customer number (if applicable).

**Call FM Approvals Finance Department** at +1 (1)800 972 8730 (toll-free in Canada  
and the United States only) or +1 (1)401 415 2991 (outside North America) with your  
credit card information to complete your registration.

Confirmation will be emailed.

*Seminar fee includes complete set of reference materials, refreshments and lunch.*

*Attendees are responsible for their own accommodations. See hotel information  
(on back) for details. Be sure to mention FM Approvals when making reservations.*

**Cancellation Policy:** A minimum of eight (8) people is needed to hold this seminar.  
Registrants will be notified 14 days prior to the seminar if cancellation is necessary.  
Cancellation with full refund can be made up to 14 days prior to the seminar;  
however, refunds will not be given to those who do not attend.

# HAZARDOUS LOCATIONS SEMINAR

## THIS TWO-DAY HAZARDOUS LOCATIONS SEMINAR INCLUDES A VARIETY OF TOPICS, SUCH AS:

- U.S. government requirements for electrical installations and equipment
- NEC® Articles 500 – 506
- Area classification of areas with flammable gas and vapor
- Area classification of areas with combustible dust
- Explosion-proof (Division 1) and flameproof “d” equipment
- Installation of explosion-proof and flameproof equipment
- Intrinsic safety (Division 1) and intrinsic safety “i” apparatus
- Installation of intrinsically safe apparatus
- Purged and pressurized (Division 1 and Zone 1) equipment
- Class II and Class III equipment
- Enclosures for Electrical equipment
- Class I, Division 2 and Zone 2 “n” equipment
- Installation of Class I, Division 2 and Zone 2 equipment
- Increased safety “e” equipment
- Encapsulation “m” equipment
- Powder filling “q” equipment
- Liquid immersion “o” apparatus
- Electrical trace heating
- Flammable gas detectors
- Changes in the 2023 NEC®
- Possible changes in 2026 NEC®
- European Union requirements (ATEX)
- U.K. requirements (UKEX)
- Category 1 (Equipment Protection Level Ga) apparatus
- FM Approvals process
- IECEx Equipment Certification Scheme
- Overview of FM Approvals

## SPEAKERS:

### WILLIAM G. LAWRENCE, PRINCIPAL ENGINEER

Bill Lawrence is principal engineer for the hazardous locations group of FM Approvals. Bill has been with FM Approvals for more than 40 years, and is involved with the examination and testing of electrical equipment rated for use in hazardous (classified) locations. Before joining FM Approvals, he was employed by a test instrument manufacturer where he also worked in product safety. He received his Bachelor of Science in electrical engineering from Pennsylvania State University and is a registered professional engineer in the Commonwealth of Massachusetts, USA. He currently serves on various National Fire Protection Association (NFPA), Underwriters Laboratories (ISA) and International Electrotechnical Commission (IEC) standards development committees for hazardous locations, electrical equipment, including serving as vice chair of UL TC60079 and the U.S. technical advisor to IECTC31.

### JAY N. PUNGITORE, SENIOR ENGINEERING SPECIALIST

Jay Pungitore is a senior engineer with the electrical group of FM Approvals. Jay has been with FM Approvals for more than 25 years and is primarily involved with the examination and testing of intrinsically safe and nonincendive electrical equipment for use in hazardous (classified) locations. Prior to joining FM Approvals, Jay was employed as a field service engineer where he was responsible for the start-up or troubleshooting of industrial electromechanical weighing equipment for various processes throughout North America. Jay received his Bachelor of Science in electrical engineering technology from Wentworth Institute of Technology in Boston, Massachusetts, USA.

### MARLON MITCHELL, SENIOR ENGINEERING SPECIALIST

Marlon Mitchell is a Senior Engineering Specialist for the Hazardous Locations group of FM Approvals, a US Nationally Recognized Testing Laboratory. Marlon has been with FM Approvals for 18 years and is involved with the examination and testing of equipment rated for use in hazardous (classified) locations. Before joining FM Approvals, he was employed by a national telecommunications provider where he worked in home network and device testing. He received his Bachelor of Science in Electrical Engineering from Worcester Polytechnic Institute. He serves on various National Fire Protection Association (NFPA) and Institute of Electrical and Electronics Engineers (IEEE) committees for hazardous location equipment.