

**College of
Continuing
Education**

Wood Dust Explosion Prevention/NFPA Dust Compliance & Documentation



**May 9-10, 2019
Four Points by Sheraton
Vancouver Airport
8368 Alexandra Road
Richmond, BC
\$1195 + GST**

Dust explosions are one of the major preventable losses of life and property in industry today. Many installed systems are either old or non-building code compliant to today's standards, are recent installations without the necessary explosion prevention features or poorly maintained resulting in questionable reliability of the installed explosion and fire safety features. This seminar is intended to cover all aspects of dust explosion prevention including NFPA and Canadian Building Code requirements as well as recommended proven engineering practices which control the collection, transport, storage and disposal of explosive dusts. Also included is an outline for the preparation of NFPA Benchmark documentation required for existing and new facilities which handle combustible dust to ensure safe operating conditions for the life of the facility.

This seminar will provide participants with the necessary dust explosion prevention information to prepare a combustible dust risk assessment and action plan to ensure code compliance and ensure the correct explosion protection and fire prevention engineering standards are used in their facilities.

For more information
or to register:
dal.ca/cce
or call:
1-800-565-1179



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Who Should Attend

This seminar is intended for HSE, operators, maintenance, engineering, insurers, inspectors and suppliers, who will benefit from an improved knowledge of how to design, install, operate, maintain and test existing or new explosive dust collection systems to ensure all required explosion safety devices are installed and operational through the life of the facility.

Instructor

John E. Bachynski, B.Sc. P.Eng., is President of EPM Consulting located in Halifax, Nova Scotia. He has over 30 years experience in the field of Mechanical Engineering, specializing in plant air quality, dust collection, transport, storage and dust explosion prevention. Since graduating from the Technical University of Nova Scotia (TUNS) (B.Eng., Mechanical) in 1980 he has worked continuously in the testing, design, installation and commissioning of industrial dust collection and explosion prevention systems. His project experience includes dust and fume collection systems, dilute and dense phase pneumatic conveying systems in the rubber, cement, coal, steel, grain, foundry, salt, machining, wood pellets, pulp, paper and wood handling facilities. He continues his growing client base in Canada, United States, Mexico and Europe specializing in upgrading plants to prevent dust explosions and also designing, commissioning and testing for new facilities. Mr. Bachynski has published articles on dust related topics for Bulk and Powder magazine, and has been a technical presenter for the dust related topics for Powder and Bulk, Dalhousie University, College of Continuing Education, NFPA International Technology Conference and private industry. He was nominated for a Canadian design award 1982, and received the Nova Scotia Award for Energy Conservation, Large Industry Sector, 1988 for the installation of a 40TPD wood dust burning boiler.

Benefits to Participants

- Gain a better understanding of the requirements of a complete dust explosion prevention program
- Recognize existing dust explosion problems and methods for correction
- Learn how to prepare a combustible dust risk assessment and action plan
- Familiarization of the applicable NFPA fire prevention codes and Canadian building codes relating to preventing dust explosions
- Recommended practices for collection, transport, collection and storage of combustible dusts.
- Focus on methods for ensuring capture hoods are collecting +99% of produced dust
- Review plant legal responsibilities for proactive dust explosion prevention programs
- Requirements for scheduled inspection and testing of installed explosion prevention equipment also retaining record keeping.
- Understanding of electrical zone classifications for combustible dust and the relationship with dust extraction systems and or manual cleaning programs
- Improve your understanding of capital cost when implementing an explosion prevention program
- How to prepare an NFPA compliance Gap analysis. The objective of the Gap analysis is to identify what is required to update the dust control systems to meet the objective of safe operation as defined by the NFPA, local building codes, Local and National Fire Marshall, insurance and WorkSafe. The Gap analysis identifies what needs to be done, when and methods for approximating cost.
- How to prepare an interim action plan through Gap Analysis to Compliance certification. Included will be strategies for contractor bidding, self-source procurement, third party review specifications, identifying opportunities for a Turnkey project, communication and documentation for Authority Having Jurisdiction (AHJ) reporting.
- Using compliance items from the Gap Analysis, review common construction and design problems during upgrades to meet the respective codes. This section will include resources and tools used to evaluate what is required to upgrade existing dust collection systems, eliminating the high costs of replacement.
- Methods and requirements for developing an annual compliance documentation plan. This will include training in testing and report preparation to ensure the proper maintenance and testing as per the manufacturers or Authority Having Jurisdiction is being completed.



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