

We are



Dear Wahid,

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Process Safety Dispatch

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Moving Dangerous Materials!



CLASSIFICATION OF DANGEROUS GOODS

 Subclass 1.1: Explosives with a mass explosion hazard	 Subclass 1.2: Explosives with a severe projection hazard	 Subclass 1.3: Explosives with a fire	 Subclass 2.1: Flammable Gas	 Subclass 2.2: Non-Flammable Gas	 Subclass 2.3: Poisonous Gases	 Class 3: Flammable Liquids
 Subclass 1.4: Minor fire or projection hazard	 Subclass 1.5: An insensitive substance with a mass explosion hazard	 Subclass 1.6: Extremely insensitive articles	 Subclass 4.1: Flammable solids	 Subclass 4.2: Spontaneously combustible solids	 Subclass 4.3: Dangerous when wet	 Class 7: Radioactive
 Subclass 6.1: Poison	 Subclass 6.2: Biohazard	 Subclass 5.1: Oxidizing agent	 Subclass 5.2: Organic peroxide (self-heating agent)	 Class 8: Corrosive substances	 Class 9: Miscellaneous dangerous substances and articles	

- "As the supplier's truck entered our delivery bay, I noticed there was smoke coming from its cargo space; a disaster waiting to happen."

- *I have a material that could be hazardous. I want to transport 'a quantity' of my material to another facility. How should I package and transport it?*

Enter the highly regulated world of **Transport of Dangerous Goods/ Hazardous Materials (HAZMAT)**.

In this special article for Process Safety Dispatch, we look at the principles behind the international rules that regulate how you must [package dangerous goods for transportation](#) by air, sea, road, rail – and even inland waterway. We also look at a few of our laboratory tests that we perform for clients to help them make their packaging and transportation decisions.

But firstly, let's look at what can happen. A few years ago, there was a manufacturer of a detergent powder. They changed their packaging for transport, increasing size. Before long, one of their batches self-ignited, just as it was being delivered in bulk by truck to their customer.

Materials can self-heat through spontaneous decomposition (e.g., fibers, carbon or activated carbon); they may just need the oxygen in the air to start self-heating. Materials may promote oxidation of other materials (oxidizers – e.g., sodium chlorate, peroxides...). Some materials, be they liquids or solids, could also simply be flammable (e.g., ethanol, kerosene, hay or straw, sulfur). Materials with these various hazard properties are surprisingly common and include everything from the most exotic chemical formulations through to everyday materials you routinely find at home. But let's look at **your** material.

[Read More](#)

**Dust Clouds, Liquids & Gases, Static Electricity, Electrical Sparks, Mechanical Sparks
Explosions - Learn all about them!**



Brand New Training Courses in Process Safety from Stonehouse. **Virtual, broadcast live and direct to your PC in two 3-hour segments.**

They are new, practical, and even a little bit entertaining!

At Stonehouse, we've been helping hundreds of businesses with their process safety consulting and testing needs. We've built decades of cumulative knowledge, and experience - and (we believe) a unique insight into industry's process safety problems and solutions. Everything from dust explosions and static electricity through to hazardous area classification and process safety management. Now it's time to let you benefit directly from this, through a new suite of live virtual training courses, complete with video footage, solution methodologies, and case studies - and even a subject knowledge tests for those who want to evidence their learnings.

Here are the brand-new training courses we have on offer. We are excited about our new look and refreshed training courses, and we hope you can join us on-line in September for all our virtual and live, bite-sized training events!

The Courses:

Exploding Dusts

You've heard it all. NFPA652, Dust Hazards Analysis, DHA, the brand new, game changing NFPA 660 even? You've even been and got a consultant in to do the necessary DHA. But do you want to know what to do next? Are you struggling to apply the DHA recommendations in a practical and cost-effective way? Or perhaps you are even wondering how you will arrange the mandatory revalidation and update of your DHA?

In our new live, bite-sized, virtual training course we are ready to guide you to all the answers. We'll give you all the basics, tell you about your dust explosion lab results, and what they mean and will lead you to the next steps in your dust fire/ explosion control journey from first-time DHA through to revalidation, including preventing explosions and all the plant protection methods available. For more information and to register, [click here](#).

Explosions

Gases, vapors, aerosols, fibers, dusts and more. We all know they can (and do) explode uncontrollably in industry threatening life, community, and business integrity. Yet, explosions and flash fires can be prevented and controlled.... if you have the knowledge, experience and sometimes ingenuity. Our 'Explosions' course is your key to a safer plant – and peace of mind.

Our bitesize course takes you from understanding to hazards analysis, to explosion prevention and protection techniques and through to compliance with standards and guidelines. And we do this with copious doses of video and case study material built up from years of practical experiences. For more information and to register, [click here](#).

Static Electricity

Static electricity is a devious subject. Fear not. We have it covered in this neat course designed for those who want to understand how static sparks arise in industry – and what to do to control this most elusive of ignition sources. We walk you through from the basics of the subject to help you understand where it all starts, we enthral you with new video clips of the subject, filmed in our own labs and we lay out practical options available to control static electricity on your plant. For more information and to register, [click here](#).

Hazardous Area Classification

You've got flammable atmospheres at your facility. You've got electrical equipment at your facility. Better make sure the two never meet – or else make sure that if they do, the electricians cannot cause a fire or explosion. Knowing where your flammable atmospheres are (classifying hazardous areas) is a fundamental requirement of good process safety – important enough to have its own NFPA standards.

In our bitesize hazardous area classification course, we aim to have you understanding the requirements of the standards, explain good industrial practice and point you in the right direction to ensure your plant is safe from the fire and explosion hazards presented by electrical equipment. For more information and to register, [click here](#).

[For more info & Registration](#)



Expert Consulting

- Dust Explosion Prevention & Mitigation
- Control of Static Electricity
- Hazardous (Electrical) Area Classification
- Process Hazard Analysis
- Process Safety Management
- Fire and Explosion Hazard Assessment
- Incident Investigation
- Organizational Process Safety Competency Assessment

Specialist Laboratory Testing

- Combustible Dust Testing
- Electrostatic Testing
- Self-Heating / Thermal Instability Testing
- Flammability Testing of Gases & Vapors



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