Health and Safety
Executive

HSE Update February 2013

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2013 Inspection Campaign

From 18/02/2013 to 15/03/2013

To deliver at least 2000 inspections across UK

Target small sites <15 workers and refurbishment

Main topics
- work at height
- good order
- asbestos and other health hazards
- welfare
- matters of evident concern

Press releases before and after

2013 Inspection Campaign

Proactively raise the provision of head protection and other PPE including RPE.

Proactive work on temporary works management with 2 duty holders per area selected for intervention with Specialist Inspector.

To demonstrate that HSE will use enforcement tools to prevent immediate risk and bring about sustained improvement

To achieve improvement in industry standards and increase awareness of HSE's expectations.

2013 Inspection Campaign

Head Protection Regs revocation due April 2013

No reduction in duty of care – Reg 4 PPE Regs 1992 require provision of head protection where necessary to control risk for employees and self employed

Reg 22(1)(d) CDM 2007 requires PC to have site rules and the wearing of suitable PPE (including head protection) should be in these rules.

Inspectors will be assessing contractor's awareness of change and compliance with need for head protection.

http://www.hse.gov.uk/contact/faqs/ppe.htm

http://www.hse.gov.uk/construction/areyou/builder.htm#leaflets

2013 Inspection Campaign

Management of temporary works

Guidance available from

http://www.hse.gov.uk/foi/internalops/sims/constrct/2_10_04.htm

BS5975:2008

www.temporarywork.info

http://www.temporaryworks.info/TWf/TWf2012_01_Hoardings_good_practice.pdf

Examples of Temporary Works

Simple potentially low risk temporary works - Standard scaffold Formwork less than 1.2m high Hoarding and fencing up to 1.2m high Simple propping schemes – 1 or 2 props Internal hoarding systems and temporary partitions not subject to wind loading Shallow excavations less than 1.2m deep/high

More complex potentially medium risk temporary works - Falsework up to 3m high Formwork for columns and walls up to 3m high More complex propping schemes – multiple props at single level Needling of structures up to 2 storeys high Excavations up to 3m deep/high Net systems not fixed to robust primary members Hoarding and fencing up to 3m high Simple designed scaffold Temporary roofs

Complex potentially high risk temporary works - Falsework and formwork over 3m high Trenchless construction, including headings, thrust bores, mini tunnels Working platforms for cranes and piling rigs Tower crane bases Façade retention schemes Flying and raking shores Complex propping schemes – multiple props and multiple levels Needling of structures greater than 2 storeys high Ground support schemes greater than 3m deep Complex designed scaffold Cofferdams Bridge erection schemes Jacking schemes Complex structural steelwork and precast concrete erection schemes Hoarding and fencing over 3m high

Fee For Intervention

First set of invoices went out at end of January.

Queries and disputes guidance at

http://www.hse.gov.uk/fee-for-intervention/queries-and-disputes.pdf

Individual Inspectors not involved.

Keep up to date at

http://www.hse.gov.uk/fee-for-intervention/index.htm

Consultations

Current consultations can be found at

http://www.hse.gov.uk/consult/live.htm

Recently concluded consultations can be found at

http://www.hse.gov.uk/consult/2012.htm

CDM consultation due April 2013

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Dust Control

Dust

- Silica:
  - Present in many materials
- Risk
  - When respirable dust
- Diseases:
  - Silicosis
  - Suspected Carcinogen
  - COPD

Crystalline silica concentrations in common materials

plastic composites	up to 90%
sandstone, gritstone, quartzite, flint	more than 70%
concrete, mortar	25% to 70%
shale	40% to 60%
china stone	up to 50%
tile	30 to 45%
slate	up to 40%
granite	up to 30%
brick	up to 30%
ironstone	up to 15%
basalt, dolerite	up to 5%

Dust

Worksafe BC video

Dust

- Wood:
  - Hardwood
  - Softwood
  - MDF
- Risk:
  - inhalable / respirable dust
- Diseases:
  - Sensitiser (asthma)
  - Carcinogenic (hardwood only)
  - COPD

Dust

- Low Toxicity:
  - Plaster
  - Marble
  - Limestone

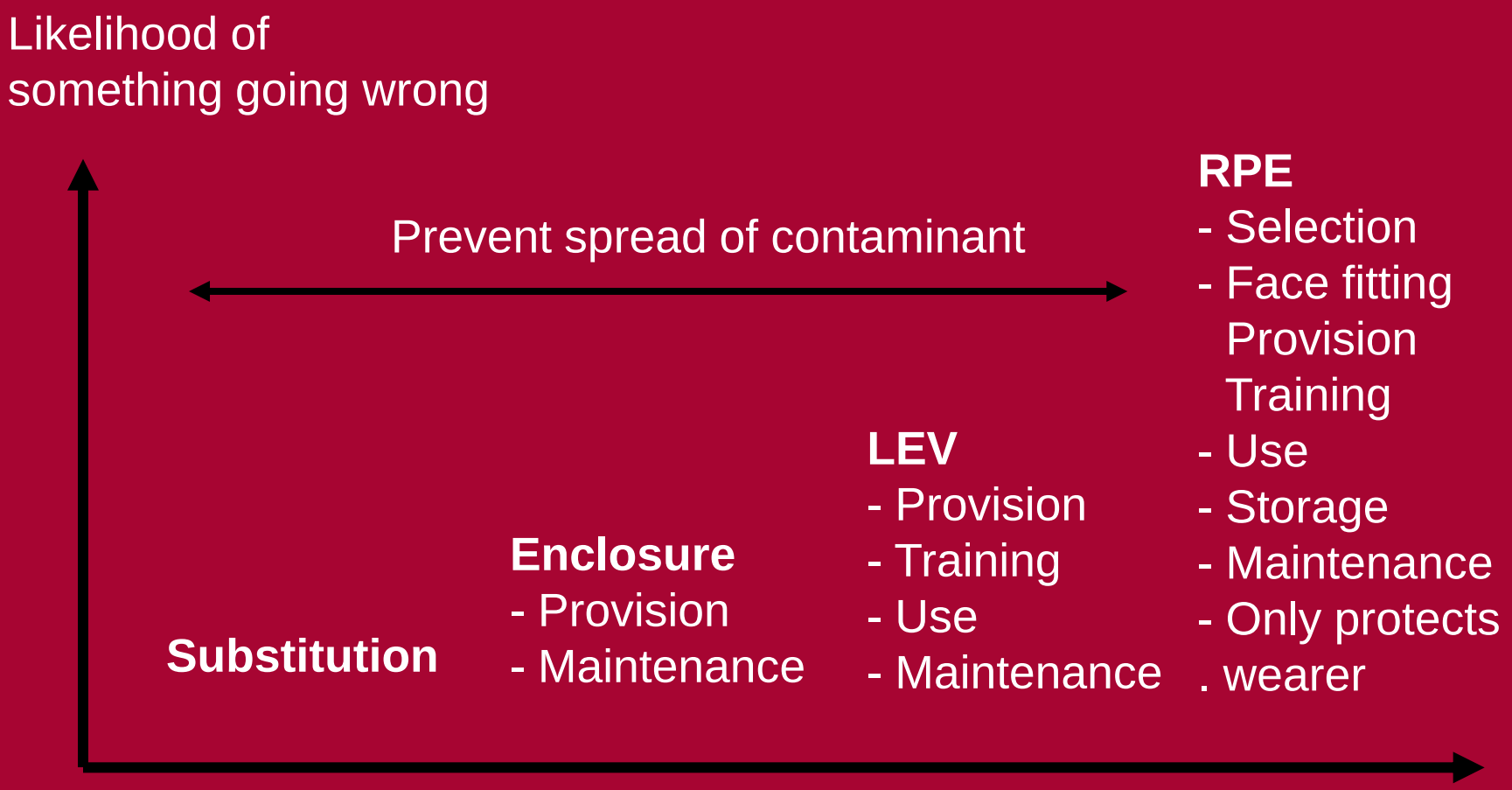
- Risk
  - when inhalable and respirable

- Diseases:
  - COPD
  - Reduced lung function

COSHH General

- Main duty on those that ‘control and own risk’
  - Likely to be subcontractor
- PC will have responsibility in some circumstances:
  - Co-ordination over water provision
  - ‘Person in control’
  - Plan, manage and monitor construction phase
  - **But CDM Not COSHH**
- Where a PC has appointed a competent contractor, they are **not required** to undertake detailed supervision

Appropriate Control



Main Principle

Control should be:

- **proportionate to the health risk**
- **Not increase overall health and safety risks**

Controlling Risk in Practice:

Dust

Silica Tasks: Cutting

- Control:
  - Water (or on-tool extraction)
  - Suitable RPE
  - DVD 1
  - DVD 2

Silica Tasks: Roof Tile Cutting

Control

- Water
- Dedicated cutting area
- Scaffold board protection
- Suitable RPE

DVD 1

NFRC THE NATIONAL FEDERATION OF ROOFING CONTRACTORS LIMITED September 2012

HEALTH & SAFETY GUIDANCE SHEET s

CONTROLLING SILICA WHEN DISC CUTTING ROOF TILES

1. INTRODUCTION

This guidance sheet gives information about the control of Respirable Crystalline Silica (RCS) issues associated with the disc cutting of concrete and clay roof tiles. However, the requirement to use water suppression applies to all roof tiles and related roof coverings such as artificial slates, concrete slates etc as well as all related fittings. This guidance note does not cover the practice of hand cutting, with the exception that this is recommended where possible to further reduce the risks.

Roof tiles often need to be cut in the verge, ridge, hip and valley area. Most roofers use a disc cutter saw for this. These saws produce large amounts of dust that contains silica that can easily be inhaled by the operator and others in the vicinity. Over time this dust can be very harmful to the lungs. Because of this it needs proper control in line with the Control of Substances Hazardous to Health Regulations (as amended) 2002 – commonly known as COSHH.

The Health and Safety Executive (HSE) has, for some time, seen the control of silica dust as a priority. NFRC has worked with them and others within the housing industry to provide a practical solution to this issue. This resulted in an interim agreement to use water suppression and respiratory protective equipment (RPE) for the cutting of all roof tiles except for valleys. Here, the established industry practice of only using RPE was allowed to continue. Wet cutting these tiles created a number of difficulties that some felt could not be effectively overcome at the time. There was also insufficient information on the level of risk created.

Subsequently, HSE has undertaken further work in this area. This has revealed that the levels of silica dust created when dry cutting valley tiles is much higher than published safety limits. Following a series of tests, effective methods of wet cutting valley tiles have also been devised. HSE therefore wants a high standard of control for cutting all roof tiles. This guidance note has been produced to assist members in complying with this requirement and COSHH. HSE will expect roofing contractors to follow it from 1st October 2012.

2. THE RISK

Silica is a natural mineral found in large amounts in things like sand, sandstone and granite. It is also commonly found in many construction materials such as concrete and mortar. The silica is broken into very fine dust (also known as Respirable Crystalline Silica or RCS) during many common tasks such as cutting, drilling and grinding. It is often called silica dust.

Silica dust damages lungs and airways. It can cause lung cancer, silicosis and Chronic Obstructive Pulmonary Disease (COPD). While some of these lung diseases, like advanced silicosis, can come on quite quickly, most take a long time. Often this is over years. They happen because regularly breathing even small amounts of dust add up and damage the lungs and airways. Unfortunately, by the time the damage is noticed it is more difficult to treat. Because of this it is important to limit the amount of silica dust every time work is done so that the total amount someone may breathe in over the years does not build up.

Even though roof tiles can be cut quickly this does not mean that the work is low risk. HSE has found that dry cutting a single valley side can produce very high silica levels. COSHH sets a limit on the amount of silica dust that someone can breathe. This limit is not large. The image shows the maximum amount of silica you can breathe when averaged over a normal working day as compared to a penny. This limit is the legal maximum, the most you can breathe **after** the right controls have been used. For tasks that can create high levels of silica, like cutting roof tiles these controls have to be very good as the risk from the silica is high.

1

Silica Tasks: Wall Chasing

- Control
  - On-tool extraction (M or H class)
  - Suitable RPE
  - DVD 1

DVD 2

Silica Tasks: Breaking Indoors

- Control for handheld breaker:
  - On-tool extraction (M or H class unit)
  - Suitable RPE

- Control for machine breaker
  - Water spray
  - Filtered cab where possible
  - Suitable RPE where not

Silica Tasks: Breaking Indoors

- Also consider
  - Mechanical ventilation
  - Powered hood
  - Segregation

Silica Tasks: Rotary Drilling

- One-off holes
  - No special controls
- Multiple holes ’15-30’ minutes
  - Dust collector
  - Cordless extraction
  - On-tool adaptor to M or H class unit
- Main activity
  - On-tool extraction with M or H class unit where possible
  - Suitable RPE

Silica Tasks: Sweeping

Control

- Remove larger bits
- Rake
- M or H extraction with vacuum attachments
- Suitable RPE depending on what else happening
- DVD 1 DVD 2

Wood Tasks: Cutting

- Control
  - Dedicated cutting area
  - On-tool extraction (M or H class unit)
  - Suitable RPE as well for longer cutting periods (15-30 minutes) /more enclosed space
  - DVD 1 DVD 2

Wood Tasks: Sanding

Control

- On-tool extraction (M or H class unit)
- Suitable RPE most situations

Low Toxicity: Sanding

Control

- On-tool extraction (L class unit+)
- No mask needed
- DVD 1
- DVD 2

On-Tool Extraction

- Different classifications:

Dust Class	Suitable for dusts with WEL	Degree of penetration
L (Light Hazard)	Greater than 1mg.m3	Less than 1%
M (Medium Hazard)	Greater / equal to 0.1mg.m3	Less than 0.1%
H (High Hazard)	Less than 0.1mg.m3 including carcinogenic dusts	Less than 0.005%

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Questions?

Or more importantly

Lunch.