



# IOSH Managing Safely for Mineral Products



# Why choose IOSH Managing Safely for Mineral Products?

A few years ago I read a book by a superb author called Simon Sinek. The book was entitled 'Start with Why', subsequently his presentation has been used as a TED presentation and has been used by companies to identify their core values, as well as that of their workforce.

So you might ask, what has this got to do with IOSH Managing Safely in Mineral Products?

Earlier in my career I had a number life changing experiences involving helping colleagues deal with the aftermath following a serious incident occurring at their site. Unfortunately, I experienced this on a number of occasions. It is fair to say each one has shaped me as a safety professional and a health and safety trainer in our sector.

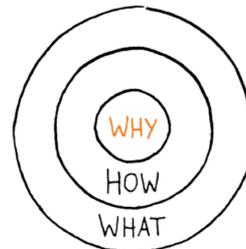
My fundamental 'Why' is I do not want anyone else to experience the impact and after effects of a work related incident occurring during their career. I want to pass on as much sector knowledge as I can to help others effectively manage health and safety within their sites or businesses.

The feedback I have received from colleagues on the regular IOSH Managing Safely course is 'It's a good course, but the contents and hazards covered don't really fit with our sector' - For this reason I felt it was time to provide the sector with an tailored solution - IOSH Managing Safely for Mineral Products.

I have tried to include as much detail on the content of our course in this guide. This will hopefully help with the 'how and what' elements of the model. I really hope you find it interesting and allow us to help in creating a positive sustainable safety culture in your team.

**Rob Shore**

Director and Lead Trainer  
Safety Coaching Academy



Taken from Start with Why by  
Simon Sinek



Approved  
training  
provider  
2430

# What operations does the course cover?



Quarries/ surface mining



Readymix concrete



Asphalt



Concrete products



Bagged/ packaged products



Cement/ lime



Plant construction sites

# Course information



Introducing managing safely



Assessing risks



Controlling risks



Understanding responsibilities



Understanding hazards



Investigating accidents



Measuring performance

## About the course

The course is delivered over three days and has been designed to be entirely powerpoint free, promoting interaction with all people attending right from the start through a series of activities.

The course is aimed at any personnel within the mineral products sector, who manage employees or contractors. It complements and is a higher level qualification than our popular IOSH Working Safely for Mineral Products one day course.

On completion of the training delegates must pass an assessment and a practical exercise to be awarded an IOSH Managing Safely for Mineral Products certificate.

The course is delivered by trainers who have worked in the Mineral Products sector for many years in both operational and safety positions to provide a real life experience throughout.

The course is not heavy on legal requirements, instead promoting best practice initiatives and ideas for improvement, making the course suitable for any operation in the Mineral Products sector worldwide.





# Module 1 – Introducing Managing Safely

## Impact of poor safety performance and why good safety performance is essential

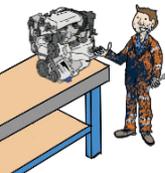
Using a fictional incident which has occurred at our site – Newborough Aggregates, delegates will discuss the moral, financial and legal impacts of work related incidents.

Through the moral impacts we cover the result of poor safety performance and the effects on families, communities and colleagues.

Within legal performance examples such as HSE Fee for Intervention, enforcement action and prosecutions are discussed along with a series of worked examples from our industry.

Information is provided on the sentencing guidelines and the hidden costs of work related incidents, providing an eye opening look at the potential costs when it goes wrong.

Finally the last part of module 1 covers the fundamental differences between accountability and responsibility, including how this is practically applied in the Mineral Products sector.





**THE DAILY NEWS**  
www.dailynews.com THE WORLD'S FAVOURITE NEWSPAPER - Since 1879

**MAN KILLED IN QUARRY ACCIDENT**

The man who was tragically killed in a quarry accident last week has been named as Michael Jones, aged 34. Michael was employed as a multiskilled quarry operative at Newborough Quarry and had worked at the site for approximately 16 years. Michael, of Oldborough, leaves a wife and two children aged 8 and 6 years.

Newborough Quarry employs 20 personnel within its Aggregates and Asphalt operation, including Michaels father, David and his Uncle, Peter. Michaels name was revealed at an inquest into his death at Oldborough Coroners Court today.

The fire service and police, along with the ambulance service were called to the quarry last Thursday. It was announced that Michael died at the scene of the accident. It is believed the accident involved Michael being struck by an item of mobile plant. Newborough Aggregates who operate Newborough Quarry, also operate a further 22 sites.

This is the second major incident involving Newborough Aggregates in the last 3 years. They were recently fined, following a major injury to an employee at another site. No one from the company was available to comment on the accident.



**NEWBOROUGH AGGREGATES**

You have been contacted and accepted a temporary role from Derek Johnson, MD of Newborough Aggregates.

The initial briefing Derek has provided you with is that he needs help with health and safety at the company. They have recently been involved in a fatality where one of their employees Michael Jones was tragically killed.

Your remit is to help the MD and the company to organise health and safety compliance and help them work towards a sustainable safety culture.

Course content

Fee for intervention (FFI)

Improvement notice

Prohibition notice

Personal prosecution

Company prosecution

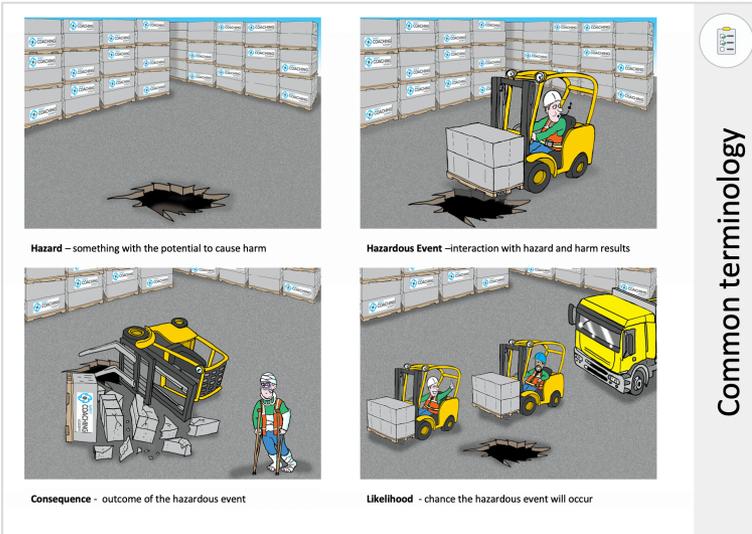
In addition to the Criminal legal effects outlined above, the Organisation may also face Civil litigation in the form of claim for compensation



Legal effects



# Module 2 – Assessing Risk



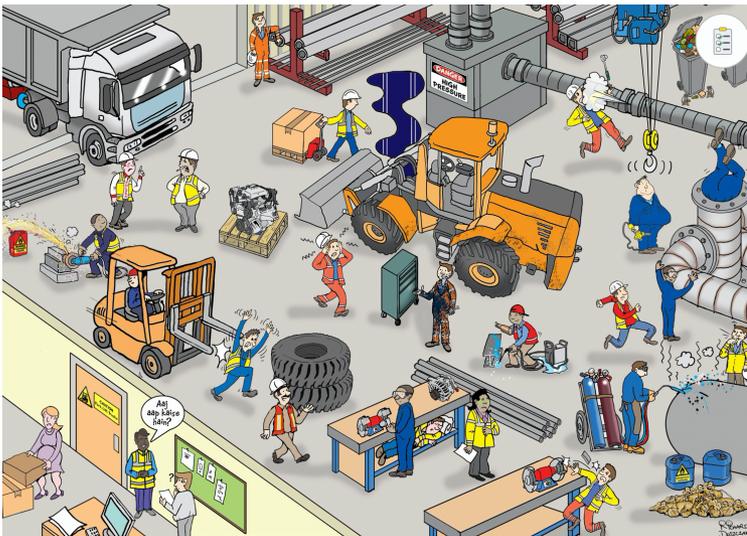
## How to prioritise and assess different levels of risk from the hazards we experience

Delegates will learn the differences between a hazard, a hazardous event, consequence and likelihood and how this can be applied when assessing the various risks found within the Mineral Products sector.

We use simple calculations to measure different levels of likelihood and consequence in order to understand and prioritise levels of risk.

We use a series of hazard pictures designed specifically for the sector to tailor the learning experience to people taking the course with us. Such as readymix concrete, asphalt and cement production environments. This allows people to easily share their experiences and what happened.

The five steps to successfully complete a risk assessment forms part of a team exercise, including the detail behind how each of the steps are applied and what problems may be experienced when considering each.





# Module 3 – Controlling Risks

## How to consider different control measures and promote worker involvement in controlling risks

Using the standard IOSH risk control hierarchy we discuss practical measures on how risk could be controlled throughout mineral products sites.

In small teams delegates are set challenges to discuss a range of control measures for a number of different work activities found within the sector.

Using a range of examples and experiences the term and application of ‘reasonably practicable’ will be evaluated and how this should be applied throughout the operations under our control.

To further embed the exercise on controlling risks we will return to the hazard pictures and discuss how different hazards can be effectively controlled using the risk control hierarchy. Sharing best practice wherever possible.

Finally, we will cover how to prepare safe systems of work – the level of detail required and the importance of worker engagement in this process. Followed by how changes can effect levels of risk, including how changes can be recorded through a simple STOP assessment process.

**Risk Control**

- Eliminate the hazard**
  - Hazardous activity/ product is replaced with something that removes the hazard completely
  - e.g. manual handling of bags of product replaced by using fork lift truck
  - e.g. elimination vibration for hand held breaker to break concrete
- Reduce the hazard potential**
  - Changes made to activity/ product to lessen the chance of harm occurring
  - e.g. Using a mobile elevating work platform when working at height, chance of falling from height is reduced, but potential remains
- Prevent contact/ exposure to the hazard**
  - Enclosing the hazard to prevent people coming into contact with it
  - Alternatively putting distance between a person and the hazard
  - e.g. Chemical stores with restricted access
- Implement and follow a safe system of work**
  - This details how activities must be carried out to minimise risk
  - Includes safe working procedures, permits to work, and site rules
  - e.g. Mobile plant rules, Permit to work for confined space access, LOTOTO
- Wear personal protective clothing and equipment**
  - Is the last line of defence or last resort, when all other options have been considered
  - This control requires a significant amount of effort and control
  - e.g. hard hat, safety glasses and personal harnesses



**Risk Control - Example**

**Inspection of conditions within small confined space**

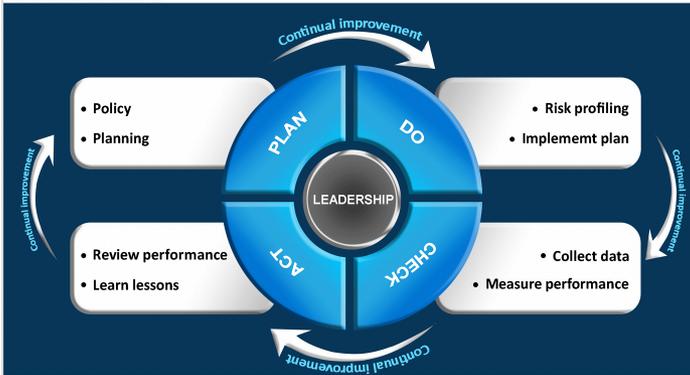
- Eliminate the hazard/ hazardous event
- Reduce the hazard potential
- Prevent contact with the hazard
- Safe system of work/ rules/ procedures
- Personal protective clothing and equipment



# Module 4 – Understanding Responsibilities



Hi there, its Derek Johnson, We have been given this model to help us improve our overall health and safety management system. Please could you present what could be considered in each section and come back with your findings for the company as a whole



Health & Safety Management Systems

## Key responsibilities and how they should be applied as a leader in the Mineral Products sector

This module covers the core responsibilities as a leader in the Mineral Products sector.

Areas covered will be level of knowledge from public, technical/ industry and experts.

The application of criminal and civil law will provide details on the key pieces of legislation within the sector and the responsibilities when managing health and safety to meet the requirements as an absolute minimum level of performance.

On completion of module 4 we will cover the importance of management systems and the requirements of ISO 45001. Teams will consider how the use of the plan – do – check – act model can help them to organise sustainable health and safety improvements

To be successful the claimant must show

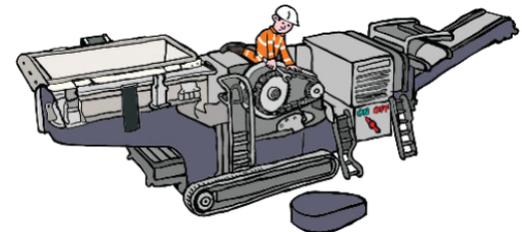
- The defendant owed the claimant a duty of care
- The duty of care was breached
- The injury/ loss was caused by a breach of that duty



If the person played a part in the injury/ loss the claim may be reduced due to **contributory negligence**  
If other employees caused the injury the employer may still be ultimately responsible due to **vicarious liability**



Civil Law





# Module 5 – Understanding Hazards

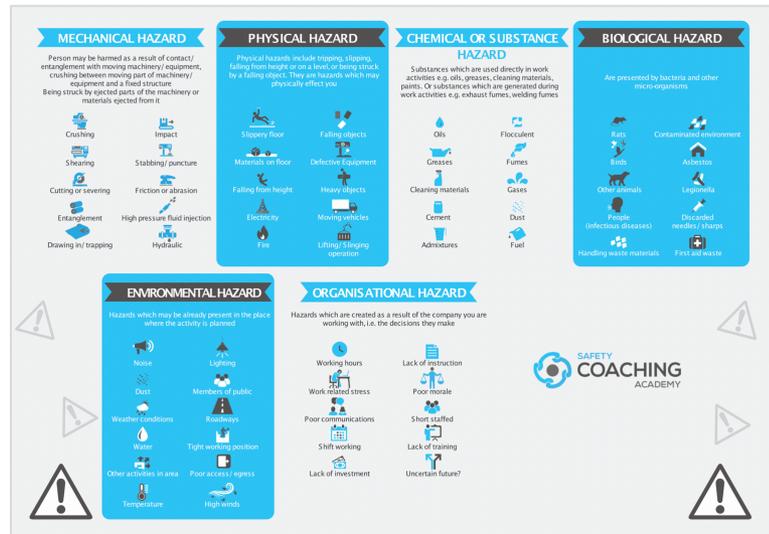
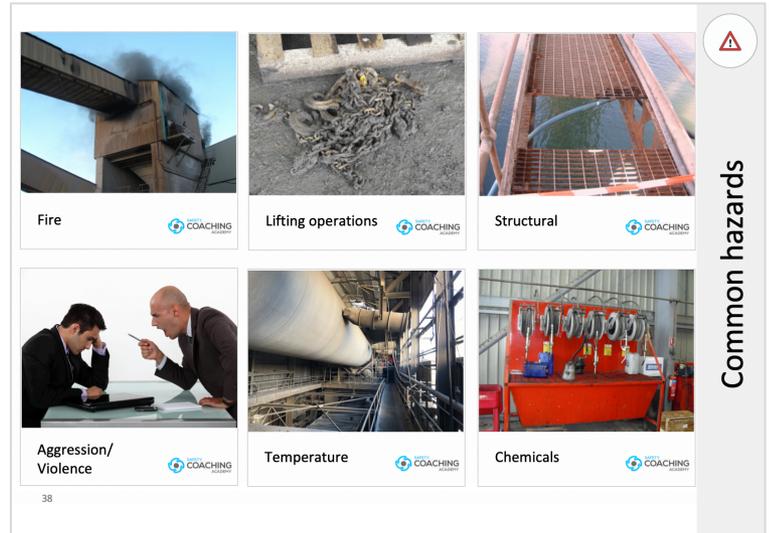
## Common hazards and the less obvious...

Module 5 concentrates on the hazards within the Mineral Products sector. The hazards covered are under five broad categories:-

- Mechanical
- Physical
- Chemical/ substances
- Biological
- Environmental
- Organisational

Teams are provided with a range of hazard photos and they are requested to consider the potential hazard effects of each and how they could be controlled using the risk control hierarchy.

Hazards covered can be tailored to the specific area of business within the Mineral Products sector. Individual company specific hazards can also be discussed when requesting the course.





# Module 6 – Investigating Incidents

## Preventing a recurrence....

Using a fictional site based incident delegates will be provided with a range of evidence such as:-

- Reconstruction photographs
- Witness statements
- Inspection records
- Procedures and assessments
- Induction and training records

Delegates will work in small teams to work through the evidence to determine the immediate, underlying and root causes for the incident.

A simple model explaining how a fair and just culture can be applied will be discussed, followed by the sequence of steps to complete an effective incident investigation.

Finally, in module 6 we carry out a game covering incidents which should be reported to the HSE under RIDDOR.



Hi there, its Derek Johnson, One of our managers has reported an accident to us. Please could you take a look through the incident investigation details provided and give your feedback. It is vitally important we learn from incidents to prevent reoccurrences occurring

A member of staff from our contractors, Mineral Products maintenance has sustained a hand injury whilst trying to remove a rock from the tail drum of one of conveyors.

Please can you review the incident investigation records to find what may have caused this to occur and what we could do to stop this from happening again.



Incident Investigation



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Behaviour type	Reward		Recognise		Learn		Prevent		
	Exceptional behaviour	Expected behaviour	Unintentional error	Normalised violation	Situational violation	Company benefit violation	Personal benefit violation	Reckless Violation	
	Yes ▾ No ▸	Yes ▾ No ▸	Yes ▾ No ▸	Yes ▾ No ▸	Yes ▾ No ▸	Yes ▾ No ▸	Yes ▾ No ▸	Yes ▾ No ▸	Yes ▾
Employee/ contractor behaviour start ▸	Did the person or team go above and beyond normal safe systems?	Did they follow procedures, instructions and best practice?	Did the person/team think they were following the rules/procedures?	Everyone else does this here...	We cannot follow the procedure and get the job done	I thought it was better for the company to carry out the job like this	I felt it was better for me personally to take a shortcut	Purposeful breach. Without showing care for self or others	
Employee/ contractor consequence	Provide appropriate performance recognition to teams/ individuals. Record to personal files	Direct line manager praises work, encourages further positive behaviour and recognises performance	Make report of the issue. Improve skills through coaching, mentoring and training. Analyse trends	Coach the team on importance of following procedures and not taking shortcuts. Procedures may need to be amended	Report all such situations. Review how procedures were implemented. Training in speaking up and stopping the job	Coach the team on values and beliefs of the company. Clear authorization given to stop the delay/ stop the job if it is not right	Consider formal disciplinary action, consider suspension until investigation complete	Take formal disciplinary action, suspension until investigation complete	
Manager/ supervisor behaviour start ▸	Did the line manager also exhibit exceptional behaviour?	Is the line manager leading by example in complying with requirements?	Is the line manager ensuring the work to required levels?	Did the line manager permit behaviour which breaks the rules without intervention?	Did the line manager know the procedure was a barrier to completing the task safely?	Did the line manager ignore shortcuts for personal benefit/ outcome?	Did the line manager overlook the behaviour on this and prior occasions?	Did the line manager combine actions of personal?	
Employee/ contractor consequence	Provide appropriate performance recognition to teams/ individuals. Record to personal files	Praise and encourage whole team in relation to performance, attitude and behaviour	Reinforce accountability and coaching on error identification and management. Coaching on taking care	Coaching in monitoring and enforcing rules and procedures. Leadership and influencing skill training carried out	Consider formal disciplinary action. Carry out recognition and enforcing procedures	Consider formal disciplinary action. Carry out training in leadership	Consider suspension until investigation complete. Take formal disciplinary action	Consider suspension until investigation complete. Take formal disciplinary action	

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**SAFETY COACHING ACADEMY**

**Fair and Just Safety Culture**

Based on Proctor's Just Culture Model (2006) and based on SHoP (2005)





# Module 7 – Measuring Performance

## Knowing where you are and how to improve performance levels

In the final module we will cover a range of measures which can be used to measure safety performance in the Mineral Products sector.

The first exercise delegates will decide if the example measures provided are reactive or proactive safety measures. Following this they will be asked to rank the control measures in order from least effective to most effective in promoting a positive safety culture.

The use of safety statistics both as a leading and lagging indicator will be evaluated, along with the limitations of solely relying on statistics to judge safety performance.

As part of our proactive exercise we will use the Hudson model (as seen opposite) to discuss the behaviours observed in relation to different levels of safety culture against four key activities.

The last two exercises focus on the building of site specific improvement plans and the importance of personal improvement plans. This is followed by a discussion exercise on the importance of recognition and reward for good safety performance

Type	Incident Reporting	Worker engagement discussions	Contractor Inductions	Risk Assessment
<b>Pathological</b> "We don't care as long as we don't get caught!"				
<b>Reactive</b> "Safety is important we do it a lot every time we have an accident"				
<b>Calculative</b> "We have systems in place to manage all hazards"				
<b>Proactive</b> "Safety leadership and values drive our Continuous Improvement"				
<b>Generative</b> "Safety is how we do everything around here"				

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Health and Safety Improvement Plan (HSIP)				
SMART	O1 -	O2 -	O3 -	O4 -
				
				
				
				
				

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# Assessment and Practical Exercise

## Course assessment

Following completion of the course learning delegates will complete an end of course assessment. This assessment utilises the standard assessment papers from IOSH, plus a range of industry specific questions.

Delegates will be prepared for the course assessment by completing a series of 'mock' assessments to ensure everyone understands the process and requirements.

Delegates are required to pass the assessment paper along with the practical exercise to pass the course. Delegates who do not pass on the first occasion will be provided with an opportunity to take another paper. Only two attempts are permitted on the end of course assessment.

## Practical Assessment

All candidates have to complete a practical assessment on their return to work. This is in the form of a risk assessment. The assessment must be completed within two weeks of completing the course and must be sent electronically to Safety Coaching on completion.

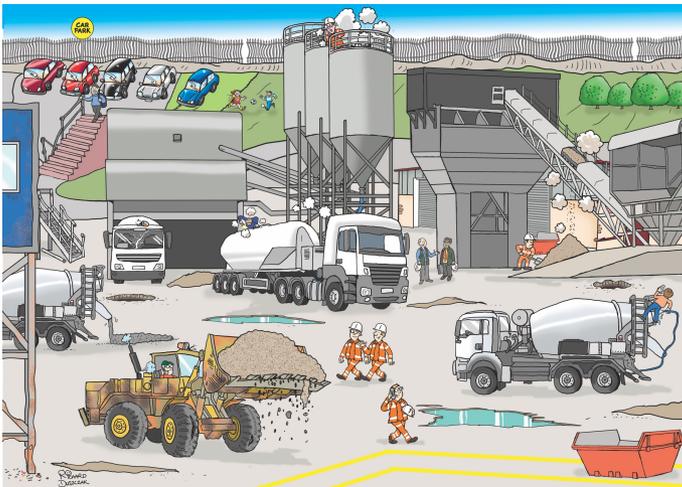
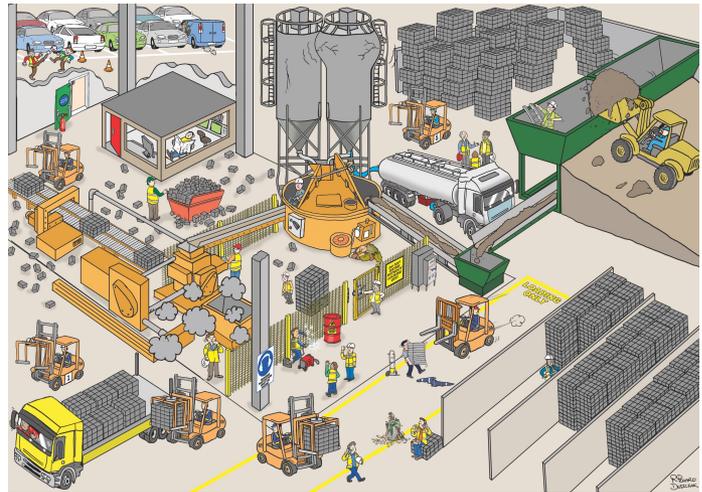
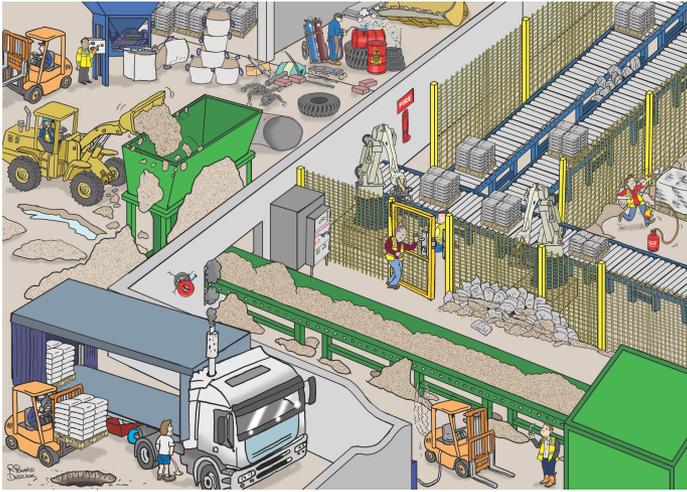
Your own company risk assessment process can be used or alternatively we can provide forms for use which mirror the content of the course.

## Important Note

At Safety Coaching throughout our careers as operational managers, safety professionals and industry trainers in the Mineral Products sector we have been fortunate to meet a broad spectrum of candidates with different learning needs. An absolute core value of our business is to assist delegates through every aspect of the qualification to ensure they receive the best possible learning experience. If any delegates need assistance during any aspect of the course, including the assessment process, we will provide support to assist where needed.



# Worker Involvement



The course has been specifically designed to meet the IOSH managing safely syllabus providing tailored training and awareness to the various sectors of the Mineral Products Sector. Helping you promote workforce involvement in safety and developing a sustainable safety culture. The above are example of the hazard pictures we use to promote conversation and control measures on the course.

# Course bookings



Courses can be arranged in-house at your own premises or alternatively local training venues can be arranged.

The minimum number of people required to hold a course is normally 8, maximum number is 16.

Courses duration is 3 full days, this can be three consecutive days or split to your needs  
The course can be also be arranged to cover shift patterns or at weekends.

To make a course booking or to obtain further details please contact - [enquiries@safetycoaching.com](mailto:enquiries@safetycoaching.com)

# IOSH Working Safely for Mineral Products

We also have an IOSH Course for operative level personnel. This course is suitable for any level within your company and provides an excellent introduction to the Mineral Products sector

The course is delivered over 4 modules to map the IOSH Working Safely syllabus

- Introducing working safely
- Defining hazard and risk
- Identifying common hazards
- Improving safety performance

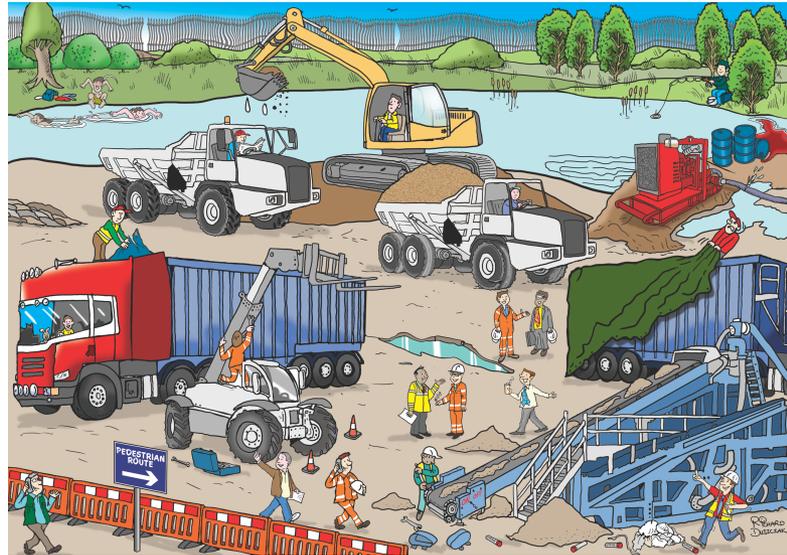
Course contains a multi-choice assessment to successfully pass the course

On successful completion IOSH Working Safely certificate is awarded.

Please see what our delegates thought...

*'Best safety course I have attended in 30 years in the industry'* - employee Hanson

*'Refreshing approach, much better than normal training courses'* – employee Tarmac



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**Target audience** - Aimed at any level of your company

**Duration** – 6 Hours, followed by multichoice assessment

**Group size** – minimum 8, maximum 16



Safety Coaching have been delivering tailored IOSH courses for over three years. We deliver our courses in organisations such as Tarmac, Hanson, Babcock International, United Plant and Longcliffe. We have delivered to 1000's of delegates. Over 95% of all who attended said they would 'definitely' recommend the course to others. The remaining 5% stated probably.



Helping you create new habits in safety



**SAFETY**  
**COACHING**  
ACADEMY