

15th - 26th May 2023

Introduction Paul Gallagher Health & Safety Officer Chairperson of the ICF H & S Committee



Please Mute your Microphone – Questions can be asked after the presentation





Safety Theme

Safe Machine, Safe Maintenance

The Facts:

From 2012 to 2022 –

402 Non Fatal Incidents

4 Fatalities

Guarding

• ½ Second Rule

 It takes the brain ½ a second to react, unfortunately most conveyor belts move an arms length in less than that time, so you will get trapped by the belt no matter how experienced you are or how fast you think you can react – *the belt is moving faster than your brain can react*.







Guarding Legal Requirements

- Direct Physical Guarding a physical barrier is your first line of defence against an accident
- It is the most effective means of protection
- It is a means of physically preventing access to dangerous areas

Campaign 2023

• It is a requirement by law

Quarry



Guarding Legal Requirements

There are 4 key points that should always be considered when designing or fitting guards:

- 1. The guards must make access to the nip point physically impossible
- 2. The guard must not impede the operation of the plant
- 3. The guard itself must not create a new manual handling risk
- 4. The guard can only be removed by a tool



Distance Guarding

- Fixed distance guarding, sometimes called proximity guarding provides protection by preventing physical access by virtue of its dimensions and its distance from the danger zone.
- Fixed distance guards must as a

Quarry

minimum, require a tool to gain entry.

Campaign 2023



Maintenance

- Maintenance is a high risk activity with specific hazards and risks
- Maintenance often involves unusual work, non-routine tasks and it is often performed in exceptional conditions, such as working in confined spaces
- Working under time pressure is also typical for maintenance operations, especially when shutdowns or high priority repairs are involved



Maintenance – What we need to do...

- Are there specific risk assessments for planned maintenance activities ?
- Are there specific risk assessments for unplanned maintenance AN Other Concrete Co.



Quarry

Campaign 2023

Activity	Maintenance			Re	1		ŧ	A155		
escription	General building and	i prop	erty n	nainte	nance	wori	e.			
sessor				Da	te					
	lucilitieut									
Hazard	lucillicut	u	k eliho	ed _					Risk	
Hazard Work at heigh		u	keliho M	ed H	•			1	Risk	
Hazard Work at heigh Tools and equi	t pment	u L L	keliho M M	H	•		н	L L	Risk M M	
Hazard Work at heigh Tools and equi Existing servic	t pment es	u L L	keliho M	H		M	H	1 1 1	Risk M M	•







Energy Isolation (Sources of Energy)

- Electrical
- Pneumatic
- Hydraulic
- Gravitational
- Thermal
- Material Flow



Isolation - Lock Out Tag Out Confirm (LOTOC) Pull Cords

Whilst it is essential that Pull Cords are operational on all your conveyors etc. They must be tested on a regular basis and records of testing must be kept on file

PULL CORDS ARE NOT AN ACCEPTABLE MEANS OF ISOLATION WHEN CARRYING OUT MAINTEANANCE





Emergency Stops

E-stops are designed to stop conveyors/machinery in the event of an emergency.

They must be tested on a regular basis

Records of testing must be kept on file



EMERGENCY STOPS ARE NOT AN ACCEPTABLE MEANS OF ISOLATION WHEN CARRYING OUT MAINTEANANCE

An effective LOTOC procedure has 4 elements

- Written Procedures
- Training
- LOTOC Hardware (Locks & Hasps etc.)
- Inspection of Isolation switches and plant

safety devices









Isolation - Lock Out Tag Out Confirm (LOTOC) Signatures are required where Padlocks / Hasps are issued (similar to PPE)

0	8		20		1		0	0		0	S.	Padlock and Multi Hasp for LOTOC		
Hard Hat	Hard Hat / Face Shield / Ear Protection	Safety Boots	High Vis Jackets / Body Warmer / T-Shirt	High Vis Trousers	Gloves	Eye Protection GOGGLES EN1668	Eye Protection Safety Glasses EN166F	Hearing Protection	Face Shield	Dust Mask / Face Mask	Hand Sanitiser	Other	Date Issued	Signature



• All personnel involved in the isolation of plant and equipment must be competent to carry out their responsibilities.

They must:

Quarry

- Understand the purpose, principles and practices of isolation procedures and safety rules
- Be aware of the quarry's major accident hazards and potential consequences
- There must be Proof of Safety Communication (Sign Off)

Campaign 2023

- Each person involved in a maintenance job requiring isolation must attach their own personal lock.
- Locks must be uniquely keyed **ONE LOCK ONE KEY !!**
- Always check the position of the isolators before applying padlocks



Campaign 2023

Quarry



During a LOTOC Isolation Procedure

Padlocks and hasps can only be removed when:

- All Safety Guards are back in place
- All workers are positioned safely for startup
- The machine is ready and safe for operation

Campaign 2023

Quarry



Otherwise the isolation padlock must remain on the plant until the work is completed or until the plant is made safe

ICF - Resources available to us

Since 2008 the ICF Safety Committee have been developing Tool Box Talks on Isolation for the members to deliver





In 2022 the ICF Safety Committee developed short safety videos hosted on You Tube that can be used as Tool Box Talks

https://youtu.be/vKX1_w4A_98





Isolation of Plant Safety Training is available within our industry





Thank you very much for your attention...







15th - 26th May 2023