# **GLOBAL SAFETY ALERT**

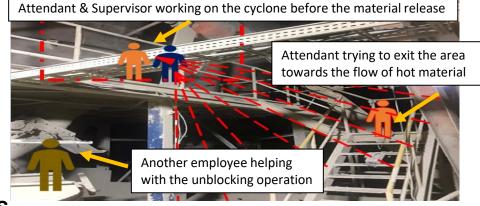
# EMPLOYEE FATALLY INJURED BY HOT MATERIAL

#### **INCIDENT DETAILS**

A supervisor and a trainee plant attendant were injured while trying to clear a cyclone blockage in the Preheater tower at a cement plant. They were using Cardox tubes (CO2 charges) to clear the blockage when suddenly hot raw meal burst out of the cyclone. The area quickly became covered in dust and there was a lack of visibility. Despite the supervisor encouraging the attendant to stay with him, he decided to quickly evacuate the area using the stairs and became covered by a plume of hot material. He was treated by first aiders until an ambulance arrived to take him to hospital. Sadly, he passed away the next day.



To see video : scan QR code or access via this URL Link . QR code / URL is only accessible to people with a valid **CEMEX Microsoft 365** account.



## **KEY FINDINGS**

- The team who were unblocking the cyclone did not follow the safe operating procedure for the task, which included the need to wear full specialized PPE for high temperatures.
- There was no evidence that a Take 5 assessment was performed prior to the task although all employees involved in the incident received proper training including Cardox safety, Take 5, Risk assessment and Clearing hot material blockages.
- The permit to work was created and signed by the control room operator, not the Supervisor. Also, the people working on the task were not briefed about the permit and requirements.
- There was an external repair to the cyclone wall (concrete box) that ruptured during the material release causing hot material to come out through it and the Cardox ports that had been left open by error
- The cyclone had been partially blocked for several hours and based on the type of blockage the kiln feed should have been stopped to clear the blockage.
- The kiln did not have safety interlocks that would have stopped the kiln feed in the event of a blockage. 10<sup>th</sup> May 2021 SA 2021 / 1

## **MANAGERS – KEY POINTS TO CHECK**

- Cyclone unblocking and Preheater tower (PHT) cleaning activities are planned, assessed and all safety requirements are strictly enforced, including the use of the correct high temperature PPE.
- Permits to work are authorized by the job supervisor involving all team members and reviewed at the job prior to commencing the work to ensure the control measures are in place and followed.
- External temporary repairs in cyclones and other associated vessels are constantly monitored for integrity, including temperature checks and any issues are resolved immediately if there's a risk of potential failure.
- There are robust systems in place to clarify when the process should be stopped and how to safely stop it in the event of a serious cyclone blockage.
- Risk assessments are reviewed and Take 5 assessments are monitored, especially prior to higher risk activities.
- There are automatic safety interlocks that will stop the kiln process in the presence of a serious cyclone blockage

#### **ALL PERSONNEL – ACTION TO TAKE**

- Always use the full specialized high temperature PPE (high temperature suits, gloves and boots, fire retardant balaclavas, hoods, etc.) when working with cyclones and other areas of the plant where there is any potential of hot material being released.
- Always participate In the permit to work process to ensure you are familiar with the risks and control measures for the task you will be carrying out.
- Ensure you are trained and certified for work in the PHT and for clearing/unblocking cyclones etc.
- Report unsafe conditions and behaviours to your supervisor and through the use of the NM/HA.
- Always carry out your Take 5 assessment before starting any task!











**Personal Protective** Equipment

Tools /

Incident/ Hazard Alert

Look after yourself

Safe Systems

Equipment

and each other