

OME SHE Learning

Learning number

RS 005 - 23-24 - L

Operating Entity

Secunda Operations; Water and Ash; Inside Ash East U203

Date of incident

15 September 2023

Incident type	Occupational Safety		rocess Safety	Environm	ent Tra	Product ansportation	Health	Securit	Equip Dam		PSF
	✓										
Relevant Life Saving Rules											
	Working at Height	Obey Roa Safety Ru		Control Lifting Operations	Control Confined Space	Control Ignition Sources	Follow LOTO Procedures	Wear Correct PPE	No Alcohol or Drugs On Site	Beware of Heavy Mobil Equipment	Control e Hazards When Excavating
	\checkmark		✓				✓				

Relevant **Process Safety Fundamentals**























Devices

Process Completenes Changes of Box-up Safe Making Respond to Alarms Well Barriers Subsurface Uncertainties Equipment

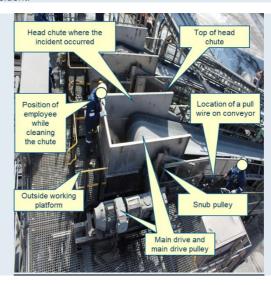
Key Undesirable Event

Operating high risk operational equipment - Loss of separation between people, rotating and moving equipment: crushing and sizing machines, conveyor belts, pack line or bulk material handling.

Description of the incident

A water jetting supervisor was fatally injured while conducting cleaning activities with a utility water hose on an ash conveyor discharge chute. The deceased elevated himself and leaned over the edge of the chute by standing on the knee rail and the bolted flange of the chute. He subsequently slipped and fell into the chute while the conveyor was in operation. The deceased was found caught between the conveyor and the structure after the incident.

Picture





- Enhance a balanced narrative of the importance of safety being the priority and adherence towards safety procedures/requirements during task execution.
 - Leaders should demonstrate an attitude of not tolerating teams to execute tasks unsafely by taking shortcuts and poor operational discipline in the adherence to safety procedures, checklists and systems
 - **b.** Promote an environment where "stop, think and act" is required before and during task execution.
 - c. Team members to be encouraged to report concerns about at-risk task execution and stop any activity when observing unsafe practices.

2. Adhere to the positive isolation process and procedure.

- a. Positive energy isolation and lock out as per standard plant procedure must be followed, which includes the appropriate bump test to ensure that energy is isolated (Site specific lock out and isolation procedures).
- b. Keep the following in mind when working on rotating and moving equipment and systems:
 - Lock out and isolation must be conducted as required by prescribed procedures for maintenance work before any work commences.
 - Activating a pull trip on a conveyor belt, or performing a similar action on other equipment, does not constitute positive energy isolation. Only positive lockout suffices.
 - Consider the installation of in-field electrical isolators to enable positive isolation of critical equipment. Ensure that this change is reviewed and managed through a structured management of change process.

Re-emphasise the intent, legal accountabilities and importance of the permit to work process and procedure adherence.

- All safe making activities (e.g., positive isolation) must be physically verified prior to issuing a permit. (SSC-SAF-RPR-00001 Sasol Regional RSA Procedure for work permits).
- **b.** A permit should only be issued when all associated unmitigated risks (section 3 of the permit) for the production process and equipment were identified, and a site visit was completed.
- c. The safemaker assigned to a permit should verify the safemaking as stipulated under section 3 of the permit by the permit issuer and be authorised to sign on the permit.
- **d.** A permit should not be used to authorise vehicle entry to the site. Appendix F of the permit should be used for vehicle entry authorisation.
- e. Permit conditions and associated risks should be discussed between all permit role players and the task executing team. Where applicable, controls should be transferred to the pre task risk assessment and adhered to.

4. Institute assurance processes focusing on effectiveness of risk mitigation.

- a. Assurance audits (first and second level including technical audits) should adequately identify deviations/risks, must ensure the effectiveness of risk mitigation and follow an integrated management process. The focus should not be on administrative deviations only.
- Assurance audit data must be captured and reported to reinforce the evaluation of the effectiveness of risk mitigation.
- c. Operational teams should adopt an assurance management system that enables trend reporting and gap closure to effectively manage the first level assurance process.
- d. Planned task observations should include focus on deviations from standards / procedures.
- The management of change (MOC) process must ensure inclusion of relevant (up to date)
 engineering standards and operating conditions, and level 2 assurance signoff on their
 implementation. Also apply the MOC process when a business process change is introduced.
- As part of organisational design, consider after hours availability of supporting personnel (e.g., electrical artisans for lockout) and the impact thereof on the operational risk profiles.

Identification of standard or good practice related to the incident

Key learning and control

improvement recommendations

- 1. The emergency management rescue protocol was executed effectively and with due diligence.
- 2. Effective counselling support after the incident performed by human resources management.
- 3. Plant and service provider support to conduct the investigation was effective.

To prevent future incidents, it is recommended that this incident learning is appropriately shared and implemented by relevant persons in your Operating Model Entity, where applicable.