

Substance - Acute

Actionable Event: Sodium Peroxide Reaction

FREEPORT-McMoRAN ID # 2024-14

Event ID # 20014458

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Preliminary Incident Details		
Operation	El Paso	
Date / Time	March 26, 2024 / 11:57 p.m.	
Event Type	Near Miss	
Summary	The bulk hydrogen peroxide tank was out of service, and chemical totes were being used. The day lead asked a trainee to obtain a tote of hydrogen peroxide for manual transfer into the rod plant tank. The trainee inadvertently delivered a tote of sodium hydroxide to the staging area. Later, the night lead initiated the transfer of the staged material with the pump and hose system. The mixture of sodium hydroxide and hydrogen peroxide produced an exothermic reaction and a cloud (mist) of sodium peroxide, which can result in severe thermal hazard. The crew supervisor turned on the exhaust fans a minute after the reaction.	
Risk Category	Actionable – Significant (3) Likely (3)	
Findings / Missing Controls	 Failure to verify chemicals prior to transfer Failure to initiate a mayday when reaction occurred Lack of controls for tote chemical transfer as opposed to standard bulk tank transfer Positive control – stored chemical totes were segregated from receiving tank 	
Applicable Policies / Procedures	No current applicable policies.	
Employee Condition	No employee injuries.	
Contact	Roland Ruybe, Manager-Health and Safety	

Photos / Links



Sodium peroxide exothermic mist at 11:57 p.m.



Sodium peroxide exothermic mist at 11:58 p.m.