

SAFETY ALERT NOTIFICATION

This is NOT an investigation report. It is a WARNING that a significant incident has taken place at a location. The information below is a preliminary assessment and not a formal investigation.

OPERATION:					Fatality	Injury	Property Damage	Process Loss
ISSUED BY:								
DATE:	March 27, 2008							
TIME:	5:00 a.m.				X			
LOCATION/DEPARTMENT:	Moly Processing Plant							
INCIDENT DESCRIPTION:	A metallurgical sampling technician was exposed to hydrogen sulfide and nitrogen when he opened the window on a cell in the moly processing cleaning line in order to take a sample. Apparently, exposure to H₂S and N₂ resulted in toxic asphyxiation and the death of the operator (note: autopsy findings are not yet complete which is necessary to validate the cause of death). A plugged CO₂ control valve that fed the moly rougher circuit, directed 100% of the CO₂ feed to the conditioning tank that feeds the first cleaner flotation line. CO₂ is used to reduce pH. The increased CO₂ flow reduced the pH of the cell where the sample was being taken to low enough levels to generate H₂S.							
DETAILS OF INJURY TYPE:	Loss of life resulting from toxic asphyxiation							
POTENTIAL FOR INJURY :	Fatality	Multiple Lost-Time	Permanent Disability	Other Potential				
	X							
PROBABLE DIRECT CAUSES:	1. Failure to wear approved respiratory protection 2. Failure to have existing H₂S and pH sensors tied to alarm system							
PROBABLE ROOT CAUSES:	1. Failure to adequately address the repeated non-use of required PPE by sampling technician 2. Failure to follow SMCV's Design and Modification Standards for the Phase II modifications to the moly processing plant							
IMMEDIATE CORRECTIVE ACTION TAKEN:	1. Shutdown of moly plant until all critical action items implemented 2. Tie H₂S and pH sensors into alarm system 3. Specify required PPE usage in moly processing plant as a <i>Zero Tolerance Rule</i> 4. Install automatic shut-off valves for CO₂ feeder lines 5. Re-educate moly processing plant personnel on the hazards associated with H₂S							
REQUIRED ACTIONS FROM OTHER LOCATIONS:	1. Review safety risks and hazards associated with H₂S in moly processing plants 2. Ensure proper HAZOPs conducted for all plant modifications							

(Insert Photos below)

This is NOT an investigation report. It is a WARNING related to an ALERT of a Significant Incident that has taken place at a operation and is being communicated to enhance safety awareness should a similar situation exist. The information above is a preliminary assessment of the event and is not a formal investigation.



Example of technician of taking sample from moly cleaning circuit



Location where sampler was found after being overcome with toxic hydrogen sulfide and nitrogen