

SAFEX

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INCIDENT NOTICE

(Kindly direct all correspondence to the Secretary General)

INCIDENT TITLE: Smoke coming from AN auger bearing.

DATE POSTED	REFERENCE	SOURCE
20 December 2022	IN 22-11	Austin Powder
INCIDENT OUTLINE		
When did it happen?	July 22 nd , 2022	
Who experienced it?	Austin Powder Company, USA	
Where did it happen?	Red Diamond bulk emulsion & mix plant	
What material was involved?	Bulk Emulsion & AN prills	
What happened?	While attempting to empty the Ammonium Nitrate Prill Bin, an operator noticed that there was smoke developing from the bearing of the mixing auger and immediately stopped the auger. He then sprayed the bearing assembly with water to reduce the temperature.	
Why did it happen – theory?	Bearing failure. Lack of preventive maintenance. Corrosive atmosphere from AN dust.	
What was the impact?	Nobody was injured. Production was delayed until bearing was replaced.	

ADDITIONAL INFORMATION

Enclosure Picture

Subsequent report No

COMMENT

Value of incident

The importance of having an efficient preventive maintenance plan that covers all parts subject to wear with special attention to bearings and seals that may come in contact with emulsions and ammonium nitrate (dust). Timely replacement before they fail is an effective way to control the source of heat by friction.

The presence and alertness of operators near transfer and mixing equipment is a requirement for safe operation.

DISTRIBUTED BY:

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ENCLOSURE



Clear evidence of failed bearing: outside corrosion, not lubricated



Place where smoke was detected

Note: There is a plastic plate (spacer) to prevent interior contact of the bearing with AN. The plate has an opening at the bottom (which is hard to identify in the picture)