

## MSHA's Accident Prevention Program Miner's Tip



## **Bulk Truck Maintenance**

Category: Blasting
Mine Type: All Surface

A blaster from Indiana reminds us to CLEAN THE AUGER of bulk explosive trucks on a weekly basis. He related the following situation to MSHA and encouraged it be shared with other explosive handlers. While using a bulk truck to load Ammonium Nitrate and Fuel Oil (ANFO) on a cool morning, this blaster noticed smoke rising from the end of the auger. He immediately ceased loading and closely examined the auger. What he noticed caused concern to the blaster.

The smoke was actually the result of a buildup of a sensitized explosive blend that had become heated within the auger assembly. The truck had been previously used to blend ANFO with an emulsion



product. Improper cleaning of the auger assembly allowed the blend to build up within the auger, causing constriction within the assembly. The friction, caused from the rotating action of the auger, created heat causing the explosive to steam and/or smoke.

A weekly examination and cleaning of the auger assembly on bulk trucks allows for easier transport of the explosive throughout the auger assembly. The easier material is transported throughout the auger, the less heat and pressure that is produced. In addition, a clean auger allows for a complete blending of the ANFO and emulsion components, improving detonation characteristics.

This procedure takes very little time.

Anyone familiar with explosives knows that they can detonate from excessive heat and pressure. At the times explosives are safe and stable, precautions need to be taken to protect this product from extraneous sources of heat and pressure.

Reissued:	04/30/2002
Tag #	AP2002-M014

Remember - Safety is a Value that you can LIVE with!