HAZARD ALERT
Explosive Gas and Dust

During the past 5 months, eight explosions have occurred at metal/nonmetal mining operations. These accidents resulted in one fatality and nine nonfatal injuries. MSHA believes each of these accidents could have been prevented. We request that mine operators reevaluate all work procedures now in place regarding handling, storage or use of explosive fuels or dust. We have compiled a brief synopsis addressing each event gleaned from the preliminary information reported to MSHA. This information is not intended to replace the investigation findings pertaining to these accidents.

- February 7, 2001- An explosion occurred in the dust collector for the pulverized coal fuel system at a cement operation in Virginia. Temperature spikes reached 170 degrees fahrenheit which indicated problems in the coal grinding mill. Subsequently, hot embers were transported from the coal mill through the cyclone into the dust collector bag house where they initiated the explosion.

- February 8, 2001- An explosion occurred in the kiln at a cement operation in Pennsylvania. Two natural gas lines were lit and inserted into the kiln during the pre-heat, start-up procedure. After it was determined that the flames appeared to be extinguished, one of the lines was removed and relit. As the line was being reinserted into the kiln, it ignited the accumulation of gas.

- March 20, 2001- An explosion occurred inside an enclosed weigh scale sump at a crushed stone operation in Wisconsin. A lit, hand-held propane torch had been placed inside the sump to thaw a build up of ice. The flame extinguished, allowing an explosive mixture of gases to accumulate. When a second lit torch was placed in the sump, it ignited the explosive gases.

- April 2, 2001- An explosion occurred in the coal grinding mill at a cement operation in Alabama. The explosion, which was initiated by hot embers generated in the coal mill, damaged the grinding mill, the cyclone and the duct work of the pulverized coal feed system.

- May 3, 2001- An explosion occurred in a transfer chute at a cement operation in California. The access door had been opened and a miner was removing built-up material with an air lance. It is believed that the metal to metal contact generated by the air lance on the side of the chute provided the ignition source that ignited the coal dust.

- May 19, 2001- An explosion occurred in a kiln at a clay operation in Texas. The kiln had been taken off-line and several repairmen had entered it to perform
maintenance. As the repair was being done, an accumulation of organic dust fell and traveled through the piping into the combustion chamber where it was ignited by hot material.

- May 30, 2001- An explosion occurred in the storage bin of the indirect fired, pulverized coal feed system at a cement plant in Virginia. A fire was detected in the bin and carbon dioxide was introduced into the closed system. The coal feed was stopped and the bin was emptied. When the coal feed was restarted, hot embers remaining in the bin ignited the coal dust.

- May 31, 2001- An explosion occurred in a kiln at a cement operation in Missouri. Propane was being used to pre-heat the kiln during the start-up procedure. The flame extinguished and the kiln filled with gas which was subsequently ignited.