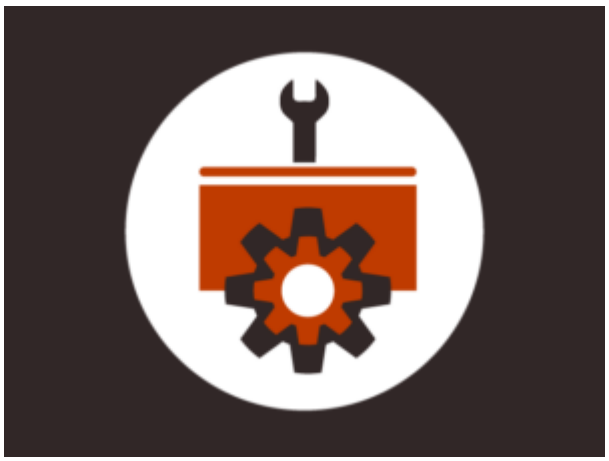
CDC Dust Control for Mining and Processing



Handbook on proven and effective control technologies that lower workers dust exposures during all stages of minerals processing.

INTRODUCTION

Throughout the mining and processing of minerals, the mined ore undergoes a number of crushing, grinding, cleaning, drying, and product sizing operations as it is processed into a marketable commodity. These operations are highly mechanized, and both individually and collectively these processes can generate large amounts of dust. If control technologies are inadequate, hazardous levels of respirable dust may be liberated into the work environment, potentially exposing workers. Accordingly, federal regulations are in place to limit the respirable dust exposure of mine workers. Engineering controls are implemented in mining operations in an effort to reduce dust generation and limit worker exposure.

For the purposes of this handbook, dust is broadly defined as small solid particles created by the breaking up of larger particles. Depending on their size, these particles can become hazardous to worker health, particularly when suspended in air. The largest size particle that can be suspended in air for long periods of time from…