§ 71.701 Sampling; general requirements.

(a) Air samples will be taken by the Secretary and will be analyzed to determine the concentrations of noxious or poisonous gases, dusts, fumes, mists, and vapors in surface installations and at surface worksites.

(b) Upon written notification by the Secretary to the operator of an underground coal mine or of a surface coal mine, the operator shall conduct any additional air sampling tests and analyses as the Secretary may from time to time require in order to ensure compliance with the standards set forth in §71.700 in each surface installation and at each surface worksite.

(c) Where concentrations of airborne contaminants in excess of the applicable threshold limit values, permissible exposure limits, or permissible excursions are known by the operator to exist in a surface installation or at a surface worksite, the operator shall immediately provide necessary control measures to assure compliance with §71.700 or §71.702, as applicable.

§ 71.702 Asbestos standard.

(a) Definitions. Asbestos is a generic term for a number of asbestiform hydrated silicates that, when crushed or processed, separate into flexible fibers made up of fibrils.

Asbestos means chrysotile, cummingtonite-grunerite asbestos (amosite), crocidolite, anthophyllite asbestos, tremolite asbestos, and actinolite asbestos.

Asbestos fiber means a fiber of asbestos that meets the criteria of a fiber. Fiber means a particle longer than 5 micrometers (μm) with a length-to-diameter ratio of at least 3-to-1.

(b) Permissible Exposure Limits (PELs)—(1) Full-shift limit. A miner’s personal exposure to asbestos shall not exceed an 8-hour time-weighted average full-shift airborne concentration of 0.1 fiber per cubic centimeter of air (f/cc).

(2) Excursion limit. No miner shall be exposed at any time to airborne concentrations of asbestos in excess of 1 fiber per cubic centimeter of air (f/cc) as averaged over a sampling period of 30 minutes.

(c) Measurement of airborne asbestos fiber concentration. Potential asbestos fiber concentration shall be determined by phase contrast microscopy (PCM) using the OSHA Reference Method in OSHA’s asbestos standard found in 29 CFR 1910.1001, Appendix A, or a method at least equivalent to that method in identifying a potential asbestos exposure exceeding the 0.1 f/cc full-shift limit or the 1 f/cc excursion limit. When PCM results indicate a potential exposure exceeding the 0.1 f/cc full-shift limit or the 1 f/cc excursion limit, samples shall be further analyzed using transmission electron microscopy according to NIOSH Method 7402 or a method at least equivalent to that method.