§ 77.1916 Welding, cutting, and soldering; fire protection.

(a) One portable fire extinguisher shall be provided where welding, cutting, or soldering with arc or flame is performed.

(b) Welding, cutting, or soldering with arc or flame within or in the vicinity of any slope or shaft, except where such operations are performed in fireproof enclosures, shall be done under the supervision of a qualified person who shall make a diligent search within or in the vicinity of the slope or shaft for fire during and after such operations.

(c) Before welding, cutting, or soldering is performed in any slope or shaft designed to penetrate into any coalbed below the surface, an examination for methane shall be made by a qualified person with a device approved by the Secretary for detecting methane. Examination for methane shall be made immediately before and periodically during welding, cutting, or soldering and such work shall not be permitted to commence or continue in air which contains 1.0 volume per centum or more of methane.

(d) Noncombustible barriers shall be installed below welding, cutting, or soldering operations in or over a shaft.

Subpart U—Approved Books and Records [Reserved]

Active workings means any place at a coal mine where miners are normally required to work or travel.

Certified person means an individual certified by the Secretary in accordance with §90.202 (Certified person; sampling) to take respirable dust samples required by this part or certified in accordance with §90.203 (Certified person; maintenance and calibration) to perform the maintenance and calibration of respirable dust sampling equipment as required by this part.

Concentration means a measure of the amount of a substance contained per unit volume of air.

District Manager means the manager of the Coal Mine Safety and Health District in which the mine is located.

Mechanized mining unit means: (1) A unit of mining equipment including hand loading equipment used for the production of material; or (2) a specialized unit which utilizes mining equipment other than specified in §70.207(e) (Bimonthly sampling; mechanized mining unit).

MRE instrument means the gravimetric dust sampler with a four channel horizontal elutriator developed by the Mining Research Establishment of the National Coal Board, London, England.

MSHA means the Mine Safety and Health Administration of the Department of Labor.

Normal work duties means duties which the Part 90 miner performs on a routine day-to-day basis in his or her job classification at a mine.

Part 90 miner means a miner employed at an underground coal mine or at a surface work area of an underground coal mine who has exercised the option under the old section 203(b) program (36 FR 20601, October 27, 1971), or under §90.3 (Part 90 option; notice of eligibility; exercise of option) of this part to work in an area of a mine where the average concentration of respirable dust in the mine atmosphere during each shift to which that miner is exposed is continuously maintained at or below 1.0 milligrams per cubic meter of air, and who has not waived these rights.

Quartz means crystalline silicon dioxide (SiO$_2$) not chemically combined with other substances and having a distinctive physical structure.

Respirable dust means dust collected with a sampling device approved by the Secretary and the Secretary of Health and Human Services in accordance with part 74 (Coal Mine Dust Personal Sampler Units) of this title. Sampling device approvals issued by the Secretary of the Interior and Secretary of Health, Education, and Welfare are continued in effect.

Secretary means the Secretary of Labor or a delegate.

Secretary of Health and Human Services means Secretary of Health and Human Services or Secretary of Health, Education, and Welfare.

Surface work area of an underground coal mine means the surface areas of land and all structures, facilities, machinery, tools, equipment, shafts, slopes, excavations, and other property, real or personal, placed upon or above the surface of such land by any person, used in, or to be used in, or resulting from, the work of extracting bituminous coal, lignite, or anthracite from its natural deposits underground by any means or method, and the work of preparing the coal so extracted, and includes custom coal preparation facilities;

Transfer means any change in the work assignment of a Part 90 miner by the operator and includes: (1) Any change in occupation code of a Part 90 miner; (2) any movement of a Part 90 miner to or from a mechanized mining unit; or (3) any assignment of a Part 90 miner to the same occupation in a different location at a mine.

Underground coal mine means an area of land and all structures, facilities, machinery, tools, equipment, shafts, slopes, tunnels, excavations, and other property, real or personal, placed upon, under, or above the surface of such land by any person, used in, or to be used in, or resulting from the work of extracting in such area bituminous coal, lignite, or anthracite from its natural deposits in the earth by any means or method, and the work of preparing the coal so extracted.

Valid respirable dust sample means a respirable dust sample collected and
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§ 90.101 Respirable dust standard.

After the twentieth calendar day following receipt of notification from MSHA that a Part 90 miner is employed at the mine, the operator shall continuously maintain the average concentration of respirable dust in the mine atmosphere during each shift to which the Part 90 miner in the active workings of the mine is exposed at or below 1.0 milligrams per cubic meter of air. Concentrations shall be expressed in terms of an equivalent concentration determined in accordance with §90.206 (Approved sampling devices; equivalent concentrations).

§ 90.102 Respirable dust standard when quartz is present.

When the respirable dust in the mine atmosphere of the active workings to which a Part 90 miner is exposed contains more than 5 percent quartz, the operator shall continuously maintain the average concentration of respirable dust in the mine atmosphere during each shift to which a Part 90 miner is exposed at or below a concentration of respirable dust computed by dividing the percent of quartz into the number 10. The application of the formula shall not result in a respirable dust standard in excess of 1.0 milligrams per cubic meter of air as measured with an approved sampling device and in terms of...