Short Diesel Emission Test

1) DPM concentrations in metal/nonmetal underground mines are determined by: a) area sampling, b) personal sampling.

2) Mine operators must develop and implement a written compliance strategy. T__, F__

3) Personal protective equipment (respirators) is the preferred way to control overexposure. T__, F__

4) Job rotation is an acceptable means of eliminating overexposure to DPM. T__, F__

5) The DPM 8-hour TWA exposure limit in micrograms per cubic meter is: a) 400 for total carbon in the total particulate sample, b) 200 for total carbon, c) 400 for total carbon in the respirable particulate, d) 400 for total carbon in the particulate less than 1 micron.

6) Acceptable controls include: a) DPM exhaust filters, b) Low emission engines, c) environmental cabs, d) mine ventilation, e) alternate fuels, f) remotely-controlled equipment.

7) DPM exhaust filters are typically over 80 % efficient. T__, F__

8) DPM exhaust filters must be regenerated. T__, F__

9) Passive regeneration involves using an electric element to clean the collected particulate. T__, F__

10) DPM is sampled for compliance with the standard by using a) a cyclone, b) a filter, c) an impactor, d) a pump.

11) Total carbon can be determined: a) by multiplying elemental carbon by 1.3, b) by adding elemental and organic carbon.

12) The error factor is the factor that the total carbon PEL is multiplied by to determine the measured concentration at which a citation is issued. T__, F__

13) Diesel fuel must contain less than ___ % sulfur.

14) Equipment operators must be authorized to tag out smoky vehicles. T__, F__

15) Only certain persons are authorized to maintain diesel equipment used underground. T__, F__

Answers: 1)b, 2)T, 3)F, 4)F, 5)d, 6)abcdef, 7)T, 8)T, 9)F, 10)abcdf, 11)ab, 12)T, 13).05, 14)T, 15)T