

## STATEMENTS OF FACT PRESHIFT CONTEST

1. A preshift examiner must be certified or registered in the State in which the coal mine is located. (Mine Act 1977, Sect. 318(a))
2. Preshift examinations must be conducted within 3 hours preceding the beginning of any 8-hour interval during which any person is scheduled to work or travel underground. (30 CFR 75.360(a)(1))
3. The lower explosive limit for methane is 5 volume percent. (MSHA3028 p.2-15, 2-47 & 2-55)
4. Air being used to ventilate areas where persons work, or travel shall contain at least 19.5 percent oxygen. (30 CFR 75.321(a)(1))
5. Ventilation is utilized to dilute, render harmless and carry away flammable, explosive, noxious, and harmful gases, dusts, smoke, and fumes. (30 CFR 75.325, 330(b)(1))
6. When taking a reading with an anemometer, a commonly used method is to traverse the airway. (MSHA 3028 p. 3-17)
7. Low barometric pressures may cause methane to migrate outward from pillared areas into active workings. (MSHA 3028 p. 2-5)
8. About 21 percent of normal air is oxygen. (MSHA 3028 p. 2-13 & 2-51)
9. Where the mining height permits and the visual examination does not disclose a hazardous condition, sound and vibration tests, or other equivalent tests, shall be made where supports are to be installed. (30 CFR 75.211(b))
10. **The specific gravity of methane is 0.5545. (MSHA 3028 p 2-15)**
11. **At each working place examined, the person doing the preshift examination shall certify by initials, date, and the time, that the examination was made. (30 CFR 75.360 f)**
12. Low voltage up to and including 660 volts, medium voltage 661 volts to 1,000 volts; and high voltage means more than 1,000 volts. (30 CFR 75.2 Definitions.)
13. The upper explosive limit for methane is 15 volume percent. (MSHA 3028 p. 2-15, 2-47 & 2-55)
14. Methane detectors should be calibrated with a known methane-air mixture at least once every 31 days. (30 CFR 75.320 (a))
15. Each underground coal mine operator shall ensure that at least 2 miners in each working section on each production shift are proficient in the use of all fire suppression equipment available on such working section and know the location of such fire suppression equipment. (30 CFR 75.1503(a))

16. Carbon monoxide has no taste or odor. (MSHA 3028 p. 3-8)
17. Tests for methane concentration should be made at least 12 inches from the roof, face, ribs, and floor. (30 CFR 75.323(a))
18. The end of permanent roof support shall be posted with a readily visible warning, or a physical barrier shall be installed to impede travel beyond permanent support. (30 CFR 75.208)
19. Roof support materials, sequence of roof support installation and spacing, are stated in the Approved Roof Control Plan. (30 CFR 75.221)
20. All electric face equipment taken into or used in by the last open crosscut shall be permissible. (30 CFR 75.503)
21. Escapeways shall be clearly marked to show the route and direction of travel to the surface. (30 CFR 75.380(d)(2))
22. No person other than certified examiners may enter or remain in any underground area unless a preshift examination has been completed for the established 8-hour interval. (30 CFR 75.360(a)(1))
23. The distance between personnel doors shall be no more than 300 feet in seam heights below 48 inches and 600 feet in seams heights 48 inches or higher. (30 CFR 75.333 (5cc (1)))
24. Tests for oxygen deficiency shall be made by a qualified person with MSHA approved oxygen detectors maintained in permissible and proper operating condition. (30 CFR 75.320(b))
25. The maximum 8-hour exposure level for carbon monoxide is 50 ppm. (MSHA 3028 p. 2-9)
26. The minimum last open crosscut air requirements also apply to sections which are not operating but are capable of producing coal by simply energizing the equipment on the section. (30 CFR 75.325(b))
27. Lubricating oil and grease kept underground shall be stored in fireproof, closed metal containers. (30 CFR 75.1104)
28. The results of the preshift examination must be recorded in a book, provided for that purpose on the surface, before any persons other than the certified persons may enter any underground areas. (30 CFR 75.360(g))
29. All fire suppression devices shall be visually inspected at least once each week by a person qualified to make such inspections. (30 CFR 75.1107-16(a))
30. Waterlines shall be equipped with firehose outlets with valves at 300-foot intervals along each belt conveyor and at tailpieces. (30 CFR 75.1100-2 (3b))
31. A bar for taking down loose material shall be available in the working place or on all face equipment except haulage equipment. (30 CFR 75.211(d))

32. The operator must establish 8-hour intervals of time subject to the required preshift examinations. (30 CFR 75.360(a)(1))
33. In exhausting face ventilation systems, a mean entry velocity of at least 60 feet per minute will reach each working face where coal is being cut mined or loaded. (30 CFR 75.326)
34. Test holes, spaced at intervals specified in the roof control plan, shall be drilled to a depth at least 12 inches above the anchorage horizon of mechanically anchored tensioned roof bolts being used. (30 CFR 75.204(f)(2))
35. Before implementing an approved revision to a roof control plan, all persons who are affected by the revision shall be instructed in its provisions. (30 CFR 75.220(d))
36. A minimum quantity of 3,000 cubic feet per minute shall reach each working face where coal is being cut, mined, drilled for blasting, or loaded. (30 CFR 75.325(a)(1))
37. Self-contained self-rescuers are used to protect the wearer from the effects of an irrespirable atmosphere.
38. The quantity of air reaching the last open crosscut of each set of entries or rooms on each working section and the quantity of air reaching the intake end of a pillar line shall be at least 9,000 cubic feet per minute unless a greater quantity is required to be specified in the approved ventilation plan. (30 CFR 75.325(b))
39. Rock dust applications to the roof, ribs, and floor shall be maintained to within 40 feet of the working face, except in those areas where the dust is too wet or too high in incombustible content. (30 CFR 75.402)
40. The results of preshift examinations may be called out to a responsible person on the surface or carried to the surface by the examiner. (30 CFR 75.360).
41. Oxygen detectors shall be calibrated at the start of each shift that the detectors will be used. (30 CFR 75.320(b))
42. Chemical extinguishers shall be examined every 6 months and the date of the examination shall be written on a permanent tag attached to the extinguisher. (30 CFR 75.1100-3)
43. Conveyor belts used to transport persons during the oncoming shift must be examined during the preshift examination. (30 CFR 75.360(b)(2))
44. High spots where methane is likely to accumulate, over haulageways where equipment will travel must be examined during the preshift examination. (30 CFR 75.360(b)(8))
45. Any area of the mine where a hazardous condition is observed shall be posted with a conspicuous danger sign where anyone entering the area would pass. (30 CFR 75.363(a))

46. Methane tests and the examiner's certification with date, time, and initials, shall be made at seals located along intake air courses that ventilate working sections where anyone is scheduled to work during the oncoming shift. (30 CFR 75.360)
47. A visual examination of the roof, face and ribs shall be made immediately before any work is started in an area and thereafter as conditions warrant. (30 CFR 75.211(a))
48. Low barometric pressures may cause seals to leak the sealed atmosphere outward into adjacent airways. (Miner's Circular 36, Bureau of Mines, 1948)
49. Regulators are used in mine ventilation to regulate airflow to meet the individual needs of each air split. (MSHA 3028 p. 3-12)
50. A sightline or other method of directional control shall be used to maintain the projected direction of mining in entries, rooms, crosscuts, and pillar splits. (30 CFR 75.203(b))
51. The operator must maintain a 300-foot diameter barrier around oil and gas wells unless a lesser barrier consistent with State laws and regulations is approved. (30 CFR 75.1700)
52. Person's underground shall use only permissible electric lamps approved by MSHA. (30 CFR 75.1703)
53. A supply of first aid equipment shall be maintained in each working section not more than 500 feet outby the active working face or faces. (30 CFR 75.1713-7 (a) (3))
54. After each time a self-rescue device is worn or carried, the device shall be inspected for damage and for the integrity of its seal by a trained person. (30 CFR 1714-3(b))
55. If a mantrip or mobile equipment is used to enter or exit a mine it must have one additional, one-hour SCSR, for each person who uses that transportation. (30 CFR 75. 1714-4(b))
56. Damaged rollers or other damaged belt conveyor components, which pose a fire hazard must be immediately repaired or replaced. (30 CFR 75.1731(a))
57. The mine emergency evacuation and firefighting program is required to instruct all miners in the use, care, and maintenance of self-rescue devices. (30 CFR 75.1502(c)(2))
58. The mine emergency evacuation and firefighting program requires a review of the mine map, the escapeway system, and location of refuge alternatives. (30 CFR 75.1502(c)(8))
59. Prior to assuming duties on a section or outby work location, a foreman shall travel both escapeways in their entirety. (30 CFR 75.1504(a)(2))

60. Each quarterly evacuation training and drill shall include recognizing when the SCSR is not functioning properly and demonstrating how to initiate and reinitiate the starting sequence. (30 CFR 75.1504(b)(2)(i))
61. An escapeway map shall show the designated escapeway from the working section or the miner's workstation to the surface or the exits at the bottom of the shaft or slope, refuge alternatives, and SCSR storage locations. (30 CFR 75 1505(a))
62. The escapeway map shall be posted or readily accessible for all miners at the following locations: in the working section, where mechanized mining equipment is being installed or removed, at the refuge alternative and at a surface location of the mine where miners congregate. (30 CFR 75.1505(a))
63. Refuge alternatives shall be located within 1,000 feet from the nearest working face and from the locations where mechanized mining equipment is being installed or removed. (30 CFR 75.1506(c)(1))
64. At all times, the site and area around the refuge alternative shall be kept clear of machinery, materials, and obstructions. (30 CFR 75.1506(g))
65. Telephones or equivalent two-way communication facilities shall be located not more than 500 feet outby the last open crosscut and not more than 800 feet from the farthest point of penetration of the working places on a working section. (30 CFR 75.1600-2(a))
66. Belt conveyors that do not transport men should have start and stop controls installed at intervals not to exceed 1,000 feet. (30 CFR 75.1403-5(h))
67. Track haulage roads should have a continuous clearance on one side of at least 24 inches from the farthest projection of normal traffic. (30 CFR 75.1403-8(d))
68. The clearance space on all track haulage roads should be kept free of loose rock, supplies and other loose materials. (30 CFR 75.1403-8(d))
69. Off track haulage roadways should be maintained as free as practicable from bottom irregularities, debris, and wet or muddy conditions. (39 CFR 75.1403-10(i))
70. Only permissible explosives approved sheathed explosive units, and permissible blasting units shall be used underground. (30 CFR 75.1310(a))
71. All underground explosives magazines shall be located at least 25 feet from roadways and any source of electric current. (30 CFR 75.1312(e)(1))
72. The map required by 75.1200 shall be kept up to date by temporary notations. (30 CFR 75.1202))
73. Temporary notations shall include Permanent ventilation controls constructed or removed, such as seals, overcasts, undercasts, regulators, and permanent stoppings, and the direction of air currents. (30 CFR 75.1202-1(b)(3))
74. Main mine fans shall be equipped with an automatic device that gives a signal

- when the fan slows or stops. (30 CFR 75.310(a)(3))
75. Each main mine fan shall be examined for proper operation by a trained person designated by the operator once each day unless a fan monitoring system is used. (30 CFR 75.312(a))
  76. The daily main mine fan examination is not required on any day when no one, including certified persons, goes underground. However, the main mine fan examination shall be completed prior to anyone entering the mine. (30 CFR 75.312(a))
  77. **The air velocity in the belt entry must be at least 50 feet per minute. (30 CFR 75.350 (A)(2))**
  78. When 1 percent or more methane is present in a working place or intake air course, except for intrinsically safe atmospheric monitoring system (AMS), electrically powered equipment in the affected area shall be deenergized, other mechanized equipment shall be shut off. (30 CFR 75.323(a)(i))
  79. When 1 percent or more methane is present in a working place or intake air course, changes or adjustments shall be made at once to the ventilation system to reduce the concentration of methane to less than 1 percent. (30 CFR 75.323(a)(ii))
  80. When 1 percent or more methane is present in a working place or intake air course, no other work shall be permitted in the affected area until the methane concentration is less than 1 percent. (30 CFR 75.323(a)(iii))
  81. When auxiliary fans and tubing are used for face ventilation, each auxiliary fan shall be deenergized or shut off when no one is present on the working section. (30CFR 75.331(a)(3))
  82. When an auxiliary fan is stopped, line brattice or other face ventilation control devices shall be used to maintain ventilation to the working places. (30 CFR 75.331(d))
  83. When two or more sets of mining equipment are simultaneously engaged in cutting, mining, or loading coal or rock from working places within the same working section, each set of mining equipment shall be on a separate split of intake air. (30 CFR 75.332(a)(2))
  84. The atmosphere in the sealed area is considered inert when the oxygen concentration is less than 10 percent or the methane concentration is less than 3 percent or more than 20.0 percent. (30 CFR 75.336(b)(1))
  85. Welding, cutting, and soldering with an arc or flame are prohibited within 150 feet of a seal. (30 CFR 75.337(f))
  86. The person conducting the preshift examination shall examine for hazardous conditions, test for methane and oxygen deficiencies, and determine if the air is moving in its proper direction. (30 CFR 75.360(b))

87. The last open crosscut is the crosscut in the line of pillars containing the permanent stoppings that separate the intake air courses and the return air courses. (30 CFR 75.360(c) (1))
88. The approved ventilation plan and any revisions shall be posted on the mine bulletin board within 1 working day following notification of approval. (30 CFR 75.370(f)(3))
89. The mine ventilation plan shall show the location where the air quantity ventilating the working place must be greater than 3,000 cubic feet per minute when coal is being cut, mined, drilled for blasting, or loaded. (30 CFR 75. 371(g))
90. The mine ventilation plan shall show the quantity of air required in the last open crosscut if greater than 9,000 cubic feet per minute. (30 CFR 75.371(m))
91. The mine ventilation map shall show the direction of air flow in all underground areas of the mine. (30 CFR 75.372 (b)(9))
92. The mine ventilation map shall show the location of all escapeways and refuge alternatives. (30 CFR 75.372 (b)(11))
93. The directional lifeline shall be equipped with one directional indicator cone securely attached to the lifeline, signifying the route of escape, placed at intervals not exceeding 100 feet. (30 CFR 75.380(d)(7)(v))
94. The directional lifeline shall be equipped with two securely attached cones, installed consecutively with the tapered section pointing inby, to signify an attached branch line. (30 CFR 75.380(d)(7)(vii))
95. Boreholes shall be drilled in each working place when the working place approaches to within 200 feet of any mine workings of an adjacent mine located in the same coal bed unless the mine working have been preshift. (30 CFR 75. 388(a) (3))
96. Where rock dust is to be applied it shall be maintained in such quantities that the incombustible content shall be not less than 80 per centum.
97. All electrical connections or splices shall be mechanically, and electrically efficient and suitable connectors shall be used. (30 CFR 75.514)
98. Power wires and cables, except trolley wires and trolley feeder wires, and bare signal wires shall be insulated adequately and fully protected. (30 CFR 75.517)
99. All underground high-voltage transmission cables shall be guarded where men regularly work or pass under them unless they are 6 ½ feet or more above the floor or rail. (30 CFR 75.807)
100. Circuit breakers shall be marked for identification. (30 CFR 75.904)