

Sampling for Respirable Coal Mine Dust Certification Examination



U.S. Department of Labor

Mine Safety and Health Administration

National Mine Health and Safety Academy

Instruction Guide Series

IG 100

2014

Sampling for Respirable Coal Mine Dust Certification Examination Question Pool

1. Turning the CMDPSU sampling head assembly upside down _____.
 - a. has no effect on the sample
 - b. makes the pump run harder
 - c. is a common cause of voided samples
 - d. is the recommended means of collecting samples

2. The purpose of the _____ is to separate respirable and non-respirable dust.
 - a. nylon cyclone
 - b. tubing
 - c. vortex finder
 - d. grit pot

3. _____ is a gravimetric personal sampling device approved under 30 CFR Part 74, Subpart B.
 - a. CMDPSU
 - b. CPDM
 - c. both a and b
 - d. SCSR

4. There are _____ nickel cadmium cells in the battery pack of a Zefon Escort ELF[®] personal dust sampler.
 - a. 3
 - b. 4
 - c. 5
 - d. 6

5. To become a person certified to sample for respirable coal mine dust, the applicant must _____.
 - a. petition the state
 - b. attend an MSHA dust certification course and pass the MSHA examination
 - c. attend a certification class conducted by a contractor
 - d. apply to the county in which the mine is located

6. A personal respirable coal mine dust sampler must be approved by _____ for electrical safety.
 - a. the Academy
 - b. MSHA
 - c. the District Manager
 - d. the inspector

7. To maintain certification to sample for respirable coal mine dust, a person must _____.
 - a. pass the NIOSH examination demonstrating competency in sampling procedures
 - b. pass the MSHA examination demonstrating competency in sampling procedures only once
 - c. pass the MSHA examination demonstrating competency in sampling procedures every three years
 - d. pass the MSHA examination demonstrating competency in sampling procedures every five years

8. The respirable coal mine dust standard in the United States is based in part on the British dust sampling instrument known as the _____.
 - a. impinger
 - b. precipitator
 - c. MRE
 - d. grit pot

9. An MMU identification number looks most like _____.
 - a. 002-0
 - b. 00-20
 - c. 0-020
 - d. 0020

10. A DWP identification number looks most like _____.
 - a. B45-1
 - b. 001-0
 - c. 12345
 - d. 1-2-3

11. The mine operator must comply with _____ provisions of the approved dust control plan.
 - a. 2
 - b. 5
 - c. all
 - d. no

12. Dust concentrations may be controlled by the use of _____.
 - a. water sprays
 - b. ventilation
 - c. scrubbers
 - d. all of the above

13. Falsifying respirable coal mine dust samples is a (an) _____ practice under the coal regulations.
 - a. common
 - b. prohibited
 - c. accepted
 - d. legitimate

14. The concentration of respirable coal mine dust is reported to the operator in _____.
 - a. pounds per pint
 - b. parts per million
 - c. feet per minute
 - d. mg/m^3 (milligrams/cubic meter), MRE equivalent

15. The _____ is a porous membrane housed in plastic and used to collect the respirable dust.
 - a. scoring
 - b. latex
 - c. calibration mark
 - d. filter

16. A mine operator may hire a contract sampler to collect samples if the contract sampler is _____.
 - a. certified by MSHA
 - b. available
 - c. handicapped
 - d. the operator's uncle

17. The only gravimetric coal mine dust personal sampler unit currently approved for use are made by _____.
 - a. MSA
 - b. Zefon International
 - c. MSHA
 - d. Sony

18. Typical designated areas (DAs) in a mine include _____ and belt entries until February 2016.
 - a. pump locations
 - b. roof bolter operators
 - c. miner operators
 - d. fan installations

19. A typical designated occupation (DO) in a mine is the _____.
 - a. brattice man
 - b. belt man
 - c. face boss
 - d. continuous miner operator

20. Certified persons (sampling) have a moral and legal obligation to collect and submit _____.
a. the mine operators' excise tax payments on coal
b. respirable dust coal mine samples representing the coal mine work-place atmosphere
c. miners' chest x-rays
d. respirable dust control plans
21. The miners' chest x-ray program is required by the _____.
a. Mine Safety and Health Administration
b. state in which the mine is located
c. Black Lung Coalition
d. NIOSH (Department of Health and Human Services)
22. The _____ pump is shielded from radio frequency interference.
a. Flow-Lite™
b. Model G
c. Flow-Lite ET™
d. Escort ELF®
23. Questions regarding CMDPSU pumps affected by radio frequency interference should be directed to the _____.
a. MSHA District Manager
b. state mine inspector
c. Zefon International
d. lamp house
24. The _____ pump does not have a float-type flow rate meter.
a. Flow-Lite™
b. Model G
c. Escort ELF®
d. Flow-Lite ET™
25. Respirable coal mine dust presents the greatest danger to the human _____.
a. windpipe
b. nose
c. lungs
d. eyes
26. The human respiratory system can defend against respirable dust particles by _____.
a. collecting dust in the nose and mouth
b. collecting dust in the windpipe
c. attacking dust particles in the lung
d. a, b, and c above

27. In addition to coal dust, another more toxic dust found in coal mines is _____.
a. quartz [silica]
b. rock dust along belts
c. wood dust from sawing timbers
d. none of the above
28. CWP is an acronym for _____.
a. cold workers pneumonia
b. certified worker position
c. coal weighted production
d. coal workers' pneumoconiosis
29. Particles capable of reaching the air sacs in the lungs are generally less than _____ microns in diameter.
a. 3
b. 5
c. 7
d. 10
30. The most effective means of controlling respirable coal mine dust are water application and _____.
a. good ventilation
b. dry roadways
c. good lighting
d. good eye protection
31. The battery "surface charge" generally dissipates within _____ minutes after the pump is turned on.
a. 15
b. 30
c. 45
d. 60
32. Modifications to the sampling head assembly are permitted _____.
a. upon approval of the District Manager
b. at no time
c. by Zefon International
d. by the state mine inspector
33. Each operator shall continuously maintain the average concentration of respirable quartz dust in the mine atmosphere at or below _____ as measured with an approved sampling device.
a. 1.0 mg/m^3 (1000 micrograms per cubic meter or $\mu\text{g/m}^3$)
b. 0.1 mg/m^3 (100 micrograms per cubic meter or $\mu\text{g/m}^3$)
c. 5%
d. 10%

34. The dust sampling device shall operate _____.
a. 10 hours
b. 8 hours
c. 6 hours
d. the entire shift including total time spent in the MMU or DA and travel time to and from the mining section or area being sampled, regardless of shift length.
35. The flow rate of the CMDPSU sampler shall be checked by a certified person sampling _____ and during the last hour of operation.
a. during the second hour of operation
b. daily
c. weekly
d. every hour
36. The dust sampling device shall operate _____.
a. only during high dust levels
b. only while coal is being produced
c. full-shift, portal to portal, regardless of shift length
d. only when the certified person is present
37. If an improper flow rate on the CMDPSU is observed during the last hour of operation, the respirable coal mine dust sample shall be _____.
a. discarded
b. reported in writing to the District Manager
c. transmitted to MSHA with a notation on the dust data card stating that the proper flow rate was not maintained
d. postponed until the following bimonthly period
38. Designated occupation samples from a mechanized mining unit shall be collected on _____ until February 2016.
a. consecutive normal production shifts
b. normal production shifts each of which is worked on consecutive days
c. either a or b
d. none of the above
39. Each designated occupation sample taken on a mechanized mining unit shall be taken on _____.
a. a normal production shift
b. any shift
c. a day when dust is greatest
d. a day when dust is least
40. For surface sampling purposes, rainy-day samples may be voided by MSHA if the _____ believes dust concentrations could have been greatly reduced by rain.
a. certified person (sampling)
b. weather forecaster
c. plant operator
d. dozer operator

41. Despite the constant-flow feature on approved gravimetric respirable coal mine dust sampling pumps, the _____ of those pumps must still be checked during the second and last hour of sampling by a certified person (sampling).
- battery voltage
 - hose length
 - permissibility features
 - flow rate
42. Scratches or cuts on the inside of the CMDPSU's nylon cyclone are called _____.
- scoring
 - bruising
 - scratching
 - marking
43. Records showing the length of each production shift for each MMU shall be made and retained for at least _____.
- one month
 - two months
 - six months
 - 2 years
44. "ECV" is an acronym for _____.
- equivalent contamination value
 - excessive concentration value
 - equal coal volume
 - estimated compliance value
45. Any DO sample, regardless of production, that exceeds the applicable standard by at least _____ shall be used to determine the concentration.
- 10 g (10 grams)
 - $1 \mu\text{g}/\text{m}^3$ (one microgram per cubic meter)
 - $0.1 \text{ mg}/\text{m}^3$ (one-tenth milligram per cubic meter)
 - $2.5 \text{ mg}/\text{m}^3$ (two and one half milligrams per cubic meter)
46. When a valid representative DO sample meets or exceeds the excessive concentration value that corresponds to the applicable standard, a record of the corrective actions shall be certified by the _____.
- the certified person (calibration)
 - the certified person (sampling)
 - the mine clerk
 - the mine foreman or equivalent mine official

47. Records shall be retained for at least _____ at a surface location of an underground coal mine of the corrective actions taken to lower the concentration of respirable dust to at or below the applicable standard.
- three years
 - one year
 - six months
 - three months
48. Records showing the length of each production shift for each DWP shall be made and retained for at least _____.
- one month
 - two months
 - six months
 - 2 years
49. Corrective actions taken to lower the concentration of respirable dust to at or below the applicable respirable dust standard shall be made _____.
- immediately
 - within five working shifts
 - within ten working shifts
 - no later than the next bi-monthly period
50. Noncompliance with the applicable DO respirable dust standard is demonstrated during the bi-monthly sampling period when _____.
- two or more valid representative samples meet or exceed the ECV
 - the average for all valid representative samples meets or exceeds the ECV
 - either a or b
 - three or more valid representative samples meet or exceed the ECV
51. Noncompliance with the applicable DO respirable dust standard is demonstrated during the quarterly sampling period when _____.
- three or more valid representative samples meet or exceed the ECV
 - the average for all valid representative samples meets or exceeds the ECV
 - one or more valid representative samples meet or exceed the ECV
 - either a or b
52. Upon issuance of a citation for a violation of the applicable respirable dust standard, the operator shall _____.
- immediately take corrective action to lower the concentration to at or below the applicable standard
 - make approved respiratory equipment available to affected miners in accordance with 30 CFR 72.700
 - make, upon implementation of the corrective actions, a record of the actions taken.
 - all of the above

53. Upon issuance of a citation for violation of an applicable standard for a DO, DA or DWP occupation, the operator shall begin sampling within _____ calendar days after the date the citation is issued.
- 2
 - 4
 - 8
 - 15
54. The operator shall begin to take five valid representative samples on the _____ day on which there is a production shift following the day of notification from MSHA that any valid sample taken from a DA exceeds the applicable standard.
- tenth
 - fifth
 - second
 - first
55. A CMDPSU shall be switched out with another CMDPSU prior to the _____ hour of operation of the device.
- 8th
 - 10th
 - 11th
 - 13th
56. Each operator of a surface coal mine or surface work area of an underground coal mine shall take _____ valid representative sample(s) from the Designated Work Position (DWP) each quarterly period.
- one
 - two
 - five
 - none of the above
57. Each mine operator must obtain one valid representative DWP sample for every _____ occupation each quarterly period.
- highwall drill operator
 - auger operator
 - oiler/greaser
 - coal truck driver
58. Mine operators with multiple work positions of the _____ occupation performing the same activity and exposed to the same dust generating source shall sample the DWP exposed to the greatest respirable dust concentration.
- bulldozer operator
 - coal shovel operator
 - coal truck driver
 - none of the above

59. When scoring is found on the _____ of the cyclone, the cyclone must be discarded and replaced.
- grit pot
 - outer surface
 - inner surface
 - none of the above
60. The identification number of the CMDPSU filter cassette must be identical to the identification number on the _____.
- dust data card
 - pump
 - vortex finder
 - tubing
61. Approved sampling devices shall be tested and examined _____ each sampling shift.
- after
 - by MSHA after
 - immediately before
 - none of the above
62. The pre-shift checks of the dust sampling devices must be performed by _____.
- a person certified to sample for respirable coal mine dust
 - a person certified to maintain and calibrate dust sampling equipment
 - MSHA
 - either a or b
63. During the preshift checks of CMDPSU samplers, the battery voltage of the dust sampling devices must be checked _____.
- under actual load
 - with the pump in the "off" position
 - without a sampling head assembly
 - both b and c
64. A personal dust sampler unit having the screws missing is _____.
- acceptable
 - non-permissible
 - a cost saver
 - not calibrated
65. The hose of the gravimetric sampling unit must be _____ feet in length.
- 2 (24 inches)
 - 3 (36 inches)
 - 4 (48 inches)
 - 5 (60 inches)

66. After sampling is complete, the filter cassettes must be sent to the address _____.
a. published in the regulations or other address as directed by the District Manager
b. on the dust data card
c. on the dust control plan
d. on the sampling pump
67. A CMDPSU dust data card not properly completed will result in the dust sample being ____ by MSHA.
a. changed
b. weighed
c. voided
d. returned
68. The cut-off voltage for a nickel-cadmium cell in any of the approved respirable coal mine dust sampler battery packs is _____ volt(s).
a. 1.0
b. 1.25
c. 2.0
d. 2.5
69. An approved CMDPSU respirable coal mine dust sampler unit consists of _____.
a. pump, sampling head assembly, filter cassette, and battery pack
b. filter cassette, pump, and battery pack
c. pump, sampling head assembly, and battery charger
d. sampling head assembly, filter cassette, and battery charger
70. Attempting to charge a battery pack having a voltage reading of less than 1.0 volt per cell may cause the battery to _____.
a. melt
b. fail
c. explode
d. discharge
71. Testing and examinations of pumps and sampling assemblies immediately prior to the shift of use must be performed _____.
a. within 1 hour of the beginning of sampling
b. within 2 hours of the beginning of sampling
c. within 3 hours of the beginning of sampling
d. within 24 hours of the beginning of sampling
72. A certified person (sampling) may have his/her certification removed by _____.
a. MSHA
b. a certified person
c. the state
d. none of the above

73. Damaged samples that may be voided by MSHA _____.
a. must be thrown away
b. must be submitted by the operator
c. should be kept for future reference
d. none of the above
74. A _____ shall complete, sign and include his/her certification number on the dust data card.
a. person directed by a certified person (sampling)
b. certified person (sampling)
c. certified person (maintenance and calibration)
d. person directed by a certified person (maintenance and calibration)
75. The maximum respirable dust limit for coal mines is _____ milligrams of respirable dust per cubic meter of air until July 31, 2016.
a. 2.0
b. 2.5
c. 3.0
d. 3.5
76. As of August 1, 2016, the maximum respirable dust limit for coal mines is _____ milligrams of respirable dust per cubic meter of air.
a. 1.0
b. 1.3
c. 1.5
d. 2.0
77. Approved gravimetric personal respirable coal mine dust samplers shall operate at a flow rate of _____ liters of air per minute.
a. 0.5
b. 1.5
c. 2.0
d. 2.5
78. The operator shall deposit into the U.S. Postal or other mail system all gravimetric respirable coal mine dust samples collected within _____ hours after the end of the sampling shift.
a. 8
b. 24
c. 36
d. 48
79. If using a CPDM, the person certified in sampling shall transmit all sample data file information within _____ hours after the end of the sampling shift.
a. 12
b. 24
c. 36
d. 48

80. Any status change regarding the mining operation that affects respirable coal mine dust sampling must be reported in writing _____ to the appropriate MSHA office after the status change.
- within 24 hours
 - as soon as possible
 - within 3 working days
 - within 5 working days
81. The regulations require _____ valid dust sample(s) from the designated occupation in each mechanized mining unit during each bimonthly period.
- 1
 - 3
 - 5
 - 10
82. During each quarterly sampling period, the operator shall take _____ valid dust sample(s) from the designated occupation in each MMU.
- 5
 - 10
 - 12
 - 15
83. The designated occupation for a conventional mining section using a cutting machine is the _____.
- coal driller
 - loading machine operator
 - cutting machine operator
 - laborer
84. The designated occupation for a continuous mining section, other than auger-type, is the _____.
- continuous mining machine operator helper
 - continuous mining machine operator
 - roof drill operator
 - brattice person
85. Sampling of each ODO (other designated occupation) on a MMU will begin _____.
- on the first day of each quarterly sampling period
 - immediately after five valid representative DO samples are taken
 - after 15 valid representative DO samples are taken on consecutive normal production shifts
 - only when three or more valid representative DO samples exceed the ECV

86. The ODO(s) on a continuous mining (CM) section using blowing face ventilation required to be sampled each calendar quarter include _____.
a. the face haulage operator working furthest downwind of the CM machine
b. all face haulage operators working on the MMU
c. the roof bolter operator working nearest the face on the return air side of the CM machine
d. b and c
87. Other designated occupations (ODOs) on a longwall mining section required to be sampled each calendar quarter include the _____.
a. mechanic
b. headgate operator
c. jacksetter working nearest the return air side of the longwall working face
d. a and c
88. If a bimonthly designated area sample exceeds the applicable standard, the operator is required to take _____ valid sample(s) from the designated area within 15 calendar days.
a. 1
b. 3
c. 5
d. 7
89. Each quarterly sampling period, the operator is required to take _____ valid sample(s) on consecutive production shifts from each designated area.
a. 1
b. 2
c. 5
d. 15
90. Noncompliance with the DO, DA or DWP applicable standard is demonstrated during the bi-monthly sampling period when _____ or the average of all valid representative samples meet or exceed the ECV corresponding to the applicable standard.
a. one sample
b. three samples
c. two or more samples
d. all of the above
91. Noncompliance with the DO applicable standard is demonstrated during the quarterly sampling period when _____ or the average of all valid representative samples meet or exceed the ECV corresponding to the applicable standard.
a. one sample
b. one or more samples
c. two or more samples
d. three or more samples

92. The _____ is responsible for collecting and submitting respirable coal mine dust samples to MSHA.
- state
 - mine operator
 - certified person - sampling
 - contractor
93. A "normal production shift" is a production shift during which the amount of material produced by an MMU is at least _____ percent of the average production recorded by the operator for the most recent 30 production shifts.
- 100
 - 50
 - 60
 - 80
94. Upon the request of the _____, the operator shall submit the date on which collecting any respirable coal mine dust samples will begin.
- miners' representative
 - District Manager of MSHA
 - state mine inspector
 - certified person (sampling)
95. After a citation for a violation of a DO respirable dust standard is issued, the operator must _____.
- sample any five shifts during the time for abatement
 - sample any combination of maintenance or production shifts
 - sample on five consecutive Tuesdays
 - sample on consecutive normal production shifts until five valid representative samples are taken
96. A _____ shall collect and submit respirable coal mine dust samples.
- person directed by any certified person (sampling)
 - certified person (sampling)
 - certified person (maintenance and calibration)
 - state enforcement agency
97. When the respirable coal mine dust standard is changed due to the presence of quartz the new applicable standard shall become effective _____ after the date of notification of such change by MSHA.
- 5 calendar days
 - 7 calendar days
 - 10 calendar days
 - 21 calendar days

98. On a continuous mining section other than auger-type, the sampling device can either be worn by the continuous mining machine operator or may be placed on the continuous mining machine within _____ in by the normal working position.
- 36 inches
 - 48 inches
 - 60 inches
 - 72 inches
99. On a longwall mining section, the dust sampling device can either be worn by the miner who works nearest the return air side of the longwall working face or along the working face on the return side within _____ of the corner.
- 36 inches
 - 48 inches
 - 60 inches
 - 42 inches
100. The four digit identification number assigned by MSHA to a mechanized mining unit shall _____.
- remain with that unit wherever that unit relocates within the mine
 - be retired whenever that unit relocates within the mine
 - change with each operating crew
 - both b and c
101. Each mine operator shall take _____ valid respirable coal mine dust sample(s) from each designated area during each bimonthly period.
- 10
 - 5
 - 3
 - 1
102. Each mine operator shall take _____ valid respirable coal mine dust sample(s) from each designated area during each quarterly period.
- 10
 - 5
 - 3
 - 1
103. The designated area locations in the mine are shown in the _____.
- District Manager's quarterly fatality report
 - approved roof control plan
 - approved ventilation plan
 - company production report

104. When quartz is present in a respirable coal mine dust sample in an amount greater than _____, the respirable dust standard may be lowered by MSHA.
- 10%
 - 1 mg/m³ or 1000 µg/m³
 - 0.1 mg/m³ or 100 µg/m³
 - 5%
105. The potential penalty for tampering with respirable coal mine dust samples includes _____.
- a civil monetary penalty and/or imprisonment
 - a criminal monetary penalty and/or imprisonment
 - imprisonment only
 - a civil monetary penalty only
106. A designated work position (DWP) must be sampled by the mine operator at least _____ time(s) during a quarterly sampling period.
- 5
 - 2
 - 1
 - 3
107. The District Manager may withdraw a DWP from sampling status with the exception of each _____ work position, which must be sampled each quarterly period.
- highwall drill operator
 - bulldozer operator
 - a and b
 - water truck operators
108. Personal dust samplers must bear the approval labels issued by MSHA and _____.
- NIOSH (or HHS)
 - Casella
 - Mine Safety Company
 - Bureau of Mines
109. An occupation code contains _____ digits.
- 2
 - 3
 - 5
 - 6
110. Once a citation for overexposure to dust is received, the operator must _____.
- Make approved respiratory equipment available to affected miners
 - Immediately take corrective action to lower the concentration of respirable coal mine dust to at or below the applicable standard
 - Make a record certified by the mine foreman or equivalent of the actions taken
 - All of the above

111. Bimonthly sampling periods begin on the _____ day of the first month of the period.
- 15th
 - 20th
 - 10th
 - 1st
112. Dust control plans, other than those for Part 90 miners, must be posted on the mine _____.
- bulletin board
 - foreman's desk
 - change room wall
 - man trip
113. Except for Part 90 miners, computer dust reports from MSHA must be posted on the mine bulletin board for at least _____ days.
- 10
 - 17
 - 20
 - 31
114. Respirable coal mine dust samples received by MSHA in excess of those required shall be considered _____ samples.
- ready-to-use
 - invalid
 - stored-for-later-use
 - required
115. The _____ initially establish the designated occupation on a mechanized mining unit.
- regulations
 - mine operator
 - inspector
 - state
116. A designated area for sampling may be established based on MSHA samples where quartz exceeds _____.
- 10%
 - 5%
 - 0.01 mg/m^3 or $10 \text{ } \mu\text{g/m}^3$
 - 0.1 mg/m^3 or $100 \text{ } \mu\text{g/m}^3$
117. The _____ may waive the rain restriction and permit rainy-day samples to be processed as normal-production samples.
- certified person (sampling)
 - District Manager
 - inspector
 - plant operator

118. For designated occupations (DOs) and other designated occupations (ODOs), any sample that exceeds the applicable standard by at least ____ milligrams/cubic meter will be considered valid regardless of the production reported by the operator.
- 0.1
 - 0.5
 - 1.0
 - 2.0
119. For designated work positions (DWPs), any sample that exceeds the applicable standard by at least ____ milligrams/cubic meter will be considered valid regardless of whether a normal work shift was achieved.
- 0.1
 - 0.5
 - 1.0
 - 2.0
120. The standard for respirable coal mine dust in the section intake air is ____ milligram(s) of dust per cubic meter of air until July 31, 2016.
- 1.0
 - 1.5
 - 2.0
 - 2.5
121. As of August 1, 2016, the standard for respirable coal mine dust in the section intake air is ____ milligram(s) of dust per cubic meter of air.
- 0.3
 - 0.5
 - 1.0
 - 1.5
122. The respirable coal mine dust regulations for underground mines are found in Title 30 CFR ____.
- Part 18
 - Part 70
 - Part 71
 - Part 72
123. The respirable coal mine dust regulations for surface mines are found in Title 30 CFR ____.
- Part 18
 - Part 70
 - Part 71
 - Part 75

124. The clamping, tightness and positioning of all sampler components are ____ by the regulations in Parts 70, 71 and 90.
- required
 - not required
 - not mentioned
 - not discussed
125. The mine operator shall not open or ____ with the seal of any filter cassette.
- play
 - write
 - tamper
 - shave
126. The mine operator shall not ____ with the CPDM or its components in any way before, during or after it is used, or alter any sample data files.
- tamper
 - write
 - play
 - run
127. The dust regulations refer to three different statuses that can exist for the mine, including producing, non-producing, and _____.
- mined out
 - abandoned
 - flooded
 - collapsed
128. Mine status changes affecting any respirable coal mine dust sampling must be reported by ____ within three working days.
- the mine operator
 - the state inspector
 - the foreman's wife
 - the truck drivers
129. The Secretary shall provide the mine operator with a ____ regarding the samples collected for all DOs, ODOs, DAs and DWPs.
- note
 - computer report
 - letter
 - book
130. Additional designated work positions (DWPs) may be established by the _____.
- inspector
 - District Manager
 - mine operator
 - superintendent

131. The initial respirable coal mine dust standard under the 1969 Act was established at _____ milligrams of dust per cubic meter (mg/m^3) of mine air.
- 4.5
 - 4.0
 - 3.5
 - 3.0
132. The final respirable coal mine dust standard under the 1969 Act and continuing to July 31, 2016 is _____.
- $3.5 \text{ mg}/\text{m}^3$
 - $3.0 \text{ mg}/\text{m}^3$
 - $2.0 \text{ mg}/\text{m}^3$
 - $1.5 \text{ mg}/\text{m}^3$
133. To ensure the integrity of the mine operators' respirable coal mine dust sampling program, the Mine Safety and Health Administration_____.
- monitors samples to detect irregularities and investigates possible causes
 - provides the operators with dust cassettes
 - transports the operators' cassettes to the weighing laboratory
 - permits operators to submit only "good" samples
134. The Mine Safety and Health Administration has prosecuted and will continue to prosecute persons charged with _____ respirable coal mine dust samples.
- tampering with
 - removing dust from
 - falsifying
 - a, b, and c above
135. If quartz [silica] is found in the respirable dust in an amount greater than $100 \mu\text{g}/\text{m}^3$, a _____ may be imposed by the Mine Safety and Health Administration.
- hiring limit
 - reduced dust standard
 - closure order
 - spot inspection schedule
136. Materials mined during a normal production shift include_____:
- rock
 - coal
 - clean coal
 - a and b
137. Miners showing evidence of pneumoconiosis as the result of a chest x-ray will be offered an opportunity to _____.
- quit
 - retire
 - transfer to a less dusty area
 - go to lunch

138. A mine operator has _____ days to transfer a miner (initial transfer) under provisions of Part 90.
- 5
 - 9
 - 10
 - 20
139. Once a Part 90 transfer is made, the mine operator must submit _____ valid respirable coal mine dust sample(s) for that miner within 15 days.
- 1
 - 2
 - 5
 - 10
140. A respirable dust control plan will be required from the mine operator for a Part 90 miner if a (an) _____ for the miner's overexposure has been issued and the operator institutes corrective actions to lower the dust concentration.
- order
 - citation
 - act
 - respirator
141. The computer dust reports for Part 90 miners shall be posted for _____ days.
- 0
 - 5
 - 10
 - 31
142. The _____ of the Part 90 miner must be entered on the dust data card.
- name
 - age
 - address
 - MIIN
143. A mine operator must pay a Part 90 miner _____.
- \$10 per hour
 - no less than his/her previous rate
 - monthly
 - on Tuesdays
144. A Part 90 miner has received a transfer because he/she _____.
- is a hard worker
 - worked at least 90 days at the mine
 - shows evidence of pneumoconiosis on a chest x-ray
 - lives close to the mine

145. Transfer provisions under Part 90 apply to _____.
a. miners 50 years of age and older
b. miners employed at a surface coal mine or surface coal facility
c. miners employed at an underground coal mine
d. both b and c
146. The maximum respirable coal mine dust standard for a Part 90 miner is _____ mg/m³ as of August 1, 2016.
a. 0.5
b. 1.0
c. 1.5
d. 2.0
147. The respirable coal mine dust regulations for miners who have exercised their option to transfer to a less dusty area of the mine are found in Title 30 CFR _____.
a. Part 48
b. Part 77
c. Part 90
d. Part 100
148. The operator may not reduce the _____ of a Part 90 miner.
a. tonnage
b. rate of pay
c. dinner break
d. travel time
149. Who is responsible for notifying a miner that he/she is eligible to exercise their option to work in a less dusty environment?
a. NIOSH
b. mine operator
c. MSHA
d. company physician
150. Samples for evaluating a Part 90 miner's exposure to respirable coal mine dust must be collected _____.
a. during the full shift
b. only during daylight hours
c. no more than eight hours
d. all of the above
151. After transfer sampling is completed, the operator shall collect _____ for each Part 90 miner while performing normal work duties.
a. five valid samples every bi-monthly period on consecutive work days
b. five valid samples every calendar quarter on consecutive work days
c. two valid samples every calendar quarter on consecutive work days
d. one valid sample every bi-monthly period

152. Noncompliance with the Part 90 applicable standard is demonstrated during the sampling period when _____ or the average of all valid representative samples meet or exceed the ECV corresponding to the applicable standard.
- one
 - three
 - two or more samples
 - all of the above
153. A copy of the computer dust sample report from MSHA for each Part 90 miner _____.
- must be posted on the mine bulletin board for 31 days
 - must be provided to all miners at the mine by the mine operator
 - must be provided only to the Part 90 miner by the mine operator
 - must be mailed to the state mine inspector
154. Within 15 days following termination of a citation where the mine operator has been cited for violating a Part 90 miner respirable coal mine dust standard, the mine operator is required to _____.
- file a Part 90 miner dust control plan for approval by the District Manager
 - transfer the miner again
 - collect a Part 90 miner sample every work day for an entire month
 - close the area of the mine where the Part 90 miner normally works