tests are in substantial compliance with paragraphs (a), (b), and (c), non-complying tests may form the basis for a finding if, in the opinion of the adjudication officer, the only available tests demonstrate technically valid results. This provision shall not excuse compliance with the requirements in paragraph (d) for any blood gas study administered during a hospitalization which ends in the miner’s death.

§ 718.106 Autopsy; biopsy.
(a) A report of an autopsy or biopsy submitted in connection with a claim shall include a detailed gross macroscopic and microscopic description of the lungs or visualized portion of a lung. If a surgical procedure has been performed to obtain a portion of a lung, the evidence shall include a copy of the surgical note and the pathology report of the gross and microscopic examination of the surgical specimen. If an autopsy has been performed, a complete copy of the autopsy report shall be submitted to the Office.
(b) In the case of a miner who died prior to March 31, 1980, an autopsy or biopsy report shall be considered even when the report does not substantially comply with the requirements of this section. A noncomplying report concerning a miner who died prior to March 31, 1980, shall be accorded the appropriate weight in light of all relevant evidence.
(c) A negative biopsy is not conclusive evidence that the miner does not have pneumoconiosis. However, where positive findings are obtained by biopsy, the results will constitute evidence of the presence of pneumoconiosis.

§ 718.107 Other medical evidence.
(a) The results of any medically acceptable test or procedure reported by a physician and not addressed in this subpart, which tends to demonstrate the presence or absence of pneumoconiosis, the sequelae of pneumoconiosis or a respiratory or pulmonary impairment, may be submitted in connection with a claim and shall be given appropriate consideration.
(b) The party submitting the test or procedure pursuant to this section bears the burden to demonstrate that the test or procedure is medically acceptable and relevant to establishing or refuting a claimant’s entitlement to benefits.

Subpart C—Determining Entitlement to Benefits

§ 718.201 Definition of pneumoconiosis.
(a) For the purpose of the Act, “pneumoconiosis” means a chronic dust disease of the lung and its sequelae, including respiratory and pulmonary impairments, arising out of coal mine employment. This definition includes both medical, or “clinical”, pneumoconiosis and statutory, or “legal”, pneumoconiosis.
(1) Clinical Pneumoconiosis. “Clinical pneumoconiosis” consists of those diseases recognized by the medical community as pneumoconioses, i.e., the conditions characterized by permanent deposition of substantial amounts of particulate matter in the lungs and the fibrotic reaction of the lung tissue to that deposition caused by dust exposure in coal mine employment. This definition includes, but is not limited to, coal workers’ pneumoconiosis, anthracosilicosis, anthracosis, anthrosilicosis, massive pulmonary fibrosis, silicosis or silicotuberculosis, arising out of coal mine employment.
(2) Legal Pneumoconiosis. “Legal pneumoconiosis” includes any chronic lung disease or impairment and its sequelae arising out of coal mine employment. This definition includes, but is not limited to, any chronic restrictive or obstructive pulmonary disease arising out of coal mine employment.
(b) For purposes of this section, a disease “arising out of coal mine employment” includes any chronic pulmonary disease or respiratory or pulmonary impairment significantly related to, or substantially aggravated by, dust exposure in coal mine employment.
(c) For purposes of this definition, “pneumoconiosis” is recognized as a latent and progressive disease which may first become detectable only after the cessation of coal mine dust exposure.
§ 718.202 Determining the existence of pneumoconiosis.

(a) A finding of the existence of pneumoconiosis may be made as follows:

(1) A chest X-ray conducted and classified in accordance with §718.102 may form the basis for a finding of the existence of pneumoconiosis. Except as otherwise provided in this section, where two or more X-ray reports are in conflict, in evaluating such X-ray reports consideration shall be given to the radiological qualifications of the physicians interpreting such X-rays.

(i) In all claims filed before January 1, 1982, where there is other evidence of pulmonary or respiratory impairment, a Board-certified or Board-eligible radiologist’s interpretation of a chest X-ray shall be accepted by the Office if the X-ray is in compliance with the requirements of §718.102 and if such X-ray has been taken by a radiologist or qualified radiologic technician and there is no evidence that the claim has been fraudulently represented. However, these limitations shall not apply to any claim filed on or after January 1, 1982.

(ii) The following definitions shall apply when making a finding in accordance with this paragraph.

(A) The term other evidence means medical tests such as blood-gas studies, pulmonary function studies or physical examinations or medical histories which establish the presence of a chronic pulmonary, respiratory or cardio-pulmonary condition, and in the case of a deceased miner, in the absence of medical evidence to the contrary, affidavits of persons with knowledge of the miner’s physical condition.

(B) Pulmonary or respiratory impairment means inability of the human respiratory apparatus to perform in a normal manner one or more of the three components of respiration, namely, ventilation, perfusion and diffusion.

(C) Board-certified means certification in radiology or diagnostic roentgenology by the American Board of Radiology, Inc. or the American Osteopathic Association.

(D) Board-eligible means the successful completion of a formal accredited residency program in radiology or diagnostic roentgenology.

(E) Certified ‘B’ reader or ‘B’ reader means a physician who has demonstrated proficiency in evaluating chest roentgenograms for roentgenographic quality and in the use of the ILO-U/C classification for interpreting chest roentgenograms for pneumoconiosis and other diseases by taking and passing a specially designed proficiency examination given on behalf of or by the Appalachian Laboratory for Occupational Safety and Health. See 42 CFR 37.51(b)(2).

(F) Qualified radiologic technician or technician means an individual who is either certified as a registered technologist by the American Registry of Radiologic Technologists or licensed as a radiologic technologist by a state licensing board.

(2) A biopsy or autopsy conducted and reported in compliance with §718.106 may be the basis for a finding of the existence of pneumoconiosis. A finding in an autopsy or biopsy of anthracotic pigmentation, however, shall not be sufficient, by itself, to establish the existence of pneumoconiosis. A report of autopsy shall be accepted unless there is evidence that the report is not accurate or that the claim has been fraudulently represented.

(3) If the presumptions described in §§718.304, 718.305 or §718.306 are applicable, it shall be presumed that the miner is or was suffering from pneumoconiosis.

(4) A determination of the existence of pneumoconiosis may also be made if a physician, exercising sound medical judgment, notwithstanding a negative X-ray, finds that the miner suffers or suffered from pneumoconiosis as defined in §718.201. Any such finding shall be based on objective medical evidence such as blood-gas studies, electrocardiograms, pulmonary function studies, physical performance tests, physical examination, and medical and work histories. Such a finding shall be supported by a reasoned medical opinion.

(b) No claim for benefits shall be denied solely on the basis of a negative chest X-ray.

(c) A determination of the existence of pneumoconiosis shall not be made solely on the basis of a living miner’s
§ 718.204 Total disability and disability causation defined; criteria for determining total disability and total disability due to pneumoconiosis.

(a) General. Benefits are provided under the Act for or on behalf of miners who are totally disabled due to pneumoconiosis, or who were totally disabled due to pneumoconiosis at the time of death. For purposes of this section, any nonpulmonary or nonrespiratory condition or disease, which causes an independent disability unrelated to the miner’s pulmonary or respiratory disability, shall not be considered in determining whether a miner is totally disabled due to pneumoconiosis. If, however, a nonpulmonary or nonrespiratory condition or disease causes a chronic respiratory or pulmonary impairment, that condition or disease shall be considered in determining whether the miner is or was totally disabled due to pneumoconiosis.

(b)(1) Total disability defined. A miner shall be considered totally disabled if the irrebuttable presumption described in §718.304 applies. If that presumption does not apply, a miner shall be considered totally disabled if the miner has a pulmonary or respiratory impairment which, standing alone, prevents or prevented the miner:

(i) From performing his or her usual coal mine work; and

(ii) From engaging in gainful employment in the immediate area of his or her residence requiring the skills or abilities comparable to those of any employment in a mine or mines in which he or she previously engaged with some regularity over a substantial period of time.

(2) Medical criteria. In the absence of contrary probative evidence, evidence which meets the standards of either paragraphs (b)(2)(i), (ii), (iii), or (iv) of this section shall establish a miner’s total disability:

(i) Pulmonary function tests showing values equal to or less than those listed in Table B1 (Males) or Table B2 (Females) in Appendix B to this part for an individual of the miner’s age, sex, and height for the FEV1 test; if, in addition, such tests also reveal the values specified in either paragraph (b)(2)(i)(A) or (B) or (C) of this section:

(A) Values equal to or less than those listed in Table B3 (Males) or Table B4 (Females) in Appendix B of this part, for an individual of the miner’s age, sex, and height for the FVC test, or

(B) Values equal to or less than those listed in Table B5 (Males) or Table B6 (Females) in Appendix B to this part, for an individual of the miner’s age, sex, and height for the MVV test, or

(C) A percentage of 55 or less when the results of the FEV1 test are divided by the results of the FVC test (FEV1/FVC equal to or less than 55%), or

(ii) Arterial blood-gas tests show the values listed in Appendix C to this part, or

(iii) The miner has pneumoconiosis and has been shown by the medical evidence to be suffering from cor pulmonale with right-sided congestive heart failure, or
(iv) Where total disability cannot be shown under paragraphs (b)(2)(i), (ii), or (iii) of this section, or where pulmonary function tests and/or blood gas studies are medically contraindicated, total disability may nevertheless be found if a physician exercising reasoned medical judgment, based on medically acceptable clinical and laboratory diagnostic techniques, concludes that a miner's respiratory or pulmonary condition prevents or prevented the miner from engaging in employment as described in paragraph (b)(1) of this section.

(c)(1) **Total disability due to pneumoconiosis defined.** A miner shall be considered totally disabled due to pneumoconiosis, as defined in §718.201, if pneumoconiosis, as defined in §718.201, is a substantially contributing cause of the miner's totally disabling respiratory or pulmonary impairment. Pneumoconiosis is a “substantially contributing cause” of the miner’s disability if it:

(i) Has a material adverse effect on the miner’s respiratory or pulmonary condition; or

(ii) Materially worsens a totally disabling respiratory or pulmonary impairment which is caused by a disease or exposure unrelated to coal mine employment.

(2) Except as provided in §718.305 and paragraph (b)(2)(iii) of this section, proof that the miner suffers or suffered from a totally disabling respiratory or pulmonary impairment as defined in paragraphs (b)(2)(i), (b)(2)(ii), (b)(2)(iv) and (d) of this section shall not, by itself, be sufficient to establish that the miner’s impairment is or was due to pneumoconiosis. Except as provided in paragraph (d), the cause or causes of a miner’s total disability shall be established by means of a physician’s documented and reasoned medical report.

(d) **Lay evidence.** In establishing total disability, lay evidence may be used in the following cases:

(1) In a case involving a deceased miner in which the claim was filed prior to January 1, 1982, affidavits (or equivalent sworn testimony) from persons knowledgeable of the miner’s physical condition shall be sufficient to establish total or partial disability due to pneumoconiosis if no medical or other relevant evidence exists which addresses the miner’s pulmonary or respiratory condition; however, such a determination shall not be based solely upon the affidavits or testimony of the claimant and/or his or her dependents who would be eligible for augmentation of the claimant’s benefits if the claim were approved.

(2) In a case involving a survivor’s claim filed on or after January 1, 1982, affidavits (or equivalent sworn testimony) from persons knowledgeable of the miner’s physical condition shall be sufficient to establish total or partial disability due to pneumoconiosis if no medical or other relevant evidence exists which addresses the miner’s pulmonary or respiratory condition; however, such a determination shall not be based solely upon the affidavits or testimony of the claimant and/or his or her dependents who would be eligible for benefits (including augmented benefits) if the claim were approved.

(3) In a case involving a deceased miner whose claim was filed on or after January 1, 1982, affidavits (or equivalent sworn testimony) from persons knowledgeable of the miner’s physical condition shall be sufficient to establish total disability due to pneumoconiosis if no medical or other relevant evidence exists which addresses the miner’s pulmonary or respiratory condition; however, such a determination shall not be based solely upon the affidavits or testimony of any person who would be eligible for benefits (including augmented benefits) if the claim were approved.

(4) Statements made before death by a deceased miner about his or her physical condition are relevant and shall be considered in making a determination as to whether the miner was totally disabled at the time of death.

(5) In the case of a living miner’s claim, a finding of total disability due to pneumoconiosis shall not be made solely on the miner’s statements or testimony.

(e) In determining total disability to perform usual coal mine work, the following shall apply in evaluating the miner’s employment activities:

(1) In the case of a deceased miner, employment in a mine at the time of death shall not be conclusive evidence that the miner was not totally disabled. To disprove total disability, it must be shown that at the time the
miner died, there were no changed circumstances of employment indicative of his or her reduced ability to perform his or her usual coal mine work.

(2) In the case of a living miner, proof of current employment in a coal mine shall not be conclusive evidence that the miner is not totally disabled unless it can be shown that there are no changed circumstances of employment indicative of his or her reduced ability to perform his or her usual coal mine work.

(3) Changed circumstances of employment indicative of a miner's reduced ability to perform his or her usual coal mine work may include but are not limited to:

(i) The miner's reduced ability to perform his or her customary duties without help; or
(ii) The miner's reduced ability to perform his or her customary duties at his or her usual levels of rapidity, continuity or efficiency; or
(iii) The miner's transfer by request or assignment to less vigorous duties or to duties in a less dusty part of the mine.

§ 718.205 Death due to pneumoconiosis.

(a) Benefits are provided to eligible survivors of a miner whose death was due to pneumoconiosis. In order to receive benefits, the claimant must prove that:

(1) The miner had pneumoconiosis (see §718.202);
(2) The miner's pneumoconiosis arose out of coal mine employment (see §718.203); and
(3) The miner's death was due to pneumoconiosis as provided by this section.

(b) For the purpose of adjudicating survivors' claims filed prior to January 1, 1982, death will be considered due to pneumoconiosis if any of the following criteria is met:

(1) Where competent medical evidence establishes that pneumoconiosis was the cause of the miner's death, or
(2) Where pneumoconiosis was a substantially contributing cause or factor leading to the miner's death or where the death was caused by complications of pneumoconiosis, or
(3) Where the presumption set forth at §718.304 is applicable.

(4) However, survivors are not eligible for benefits where the miner's death was caused by a traumatic injury or the principal cause of death was a medical condition not related to pneumoconiosis, unless the evidence establishes that pneumoconiosis was a substantially contributing cause of death.

(5) Pneumoconiosis is a "substantially contributing cause" of a miner's death if it hastens the miner's death.

(d) To minimize the hardships to potentially entitled survivors due to the disruption of benefits upon the miner's death, survivors' claims filed on or after January 1, 1982, shall be adjudicated on an expedited basis in accordance with the following procedures. The initial burden is upon the claimant, with the assistance of the district director, to develop evidence which meets the requirements of paragraph (c) of this section. Where the initial medical evidence appears to establish that death was due to pneumoconiosis, the survivor will receive benefits unless the weight of the evidence as subsequently developed by the Department or the responsible operator establishes that the miner's death was not due to pneumoconiosis as defined in paragraph (c). However, no such benefits shall be found payable before the party responsible for the payment of such benefits shall have had a reasonable opportunity for the development...
§ 718.206 Effect of findings by persons or agencies.

Decisions, statements, reports, opinions, or the like, of agencies, organizations, physicians or other individuals, about the existence, cause, and extent of a miner’s disability, or the cause of a miner’s death, are admissible. If properly submitted, such evidence shall be considered and given the weight to which it is entitled as evidence under all the facts before the adjudication officer in the claim.

§ 718.301 Establishing length of employment as a miner.

The presumptions set forth in §§718.302, 718.303, 718.305 and 718.306 apply only if a miner worked in one or more coal mines for the number of years required to invoke the presumption. The length of the miner’s coal mine work history must be computed as provided by 20 CFR 725.101(a)(32).

§ 718.302 Relationship of pneumoconiosis to coal mine employment.

If a miner who is suffering or suffered from pneumoconiosis was employed for ten years or more in one or more coal mines, there shall be a rebuttable presumption that the pneumoconiosis arose out of such employment. (See §718.203.)

§ 718.303 Death from a respirable disease.

(a)(1) If a deceased miner was employed for ten or more years in one or more coal mines and died from a respirable disease, there shall be a rebuttable presumption that his or her death was due to pneumoconiosis.

(2) Under this presumption, death shall be found due to a respirable disease in any case in which the evidence establishes that death was due to multiple causes, including a respirable disease, and it is not medically feasible to distinguish which disease caused death or the extent to which the respirable disease contributed to the cause of death.

(b) The presumption of paragraph (a) of this section may be rebutted by a showing that the deceased miner did not have pneumoconiosis, that his or her death was not due to pneumoconiosis or that pneumoconiosis did not contribute to his or her death.

(c) This section is not applicable to any claim filed on or after January 1, 1982.

§ 718.304 Irrebuttable presumption of total disability or death due to pneumoconiosis.

There is an irrebuttable presumption that a miner is totally disabled due to pneumoconiosis, that a miner’s death was due to pneumoconiosis or that a miner was totally disabled due to pneumoconiosis at the time of death, if such miner is suffering or suffered from a chronic dust disease of the lung which:

(a) When diagnosed by chest X-ray (see §718.202 concerning the standards for X-rays and the effect of interpretations of X-rays by physicians) yields one or more large opacities (greater than 1 centimeter in diameter) and would be classified in Category A, B, or C in:

(1) The ILO-U/C International Classification of Radiographs of the Pneumoconioses, 1971, or subsequent revisions thereto; or

(2) The International Classification of the Radiographs of the Pneumoconioses of the International Labour Office, Extended Classification (1968) (which may be referred to as the “ILO Classification (1968)’’); or

(3) The Classification of the Pneumoconioses of the Union Internationale Contra Cancer/Cincinnati (1968) (which may be referred to as the “UICC/Cincinnati (1968) Classification’’); or

(b) When diagnosed by biopsy or autopsy, yields massive lesions in the lung; or

(c) When diagnosed by means other than those specified in paragraphs (a)