

**IN THE UPPER TRIBUNAL  
ADMINISTRATIVE APPEALS CHAMBER**

**Case No. CI/1737/2015**

**Before:** Mr E Mitchell, Judge of the Upper Tribunal

**Decision:** The decision of the First-tier Tribunal, sitting at Leeds on 11<sup>th</sup> February 2015 (tribunal ref: *SC 007/14/00764*), involved an error of law. Under section 12 of the Tribunals, Courts and Enforcement Act 2007, I set aside the Tribunal's decision and remit the appeal for re-hearing. Directions for the re-hearing are at the end of these reasons.

**REASONS FOR DECISION**

**Introduction**

1. This appeal concerns the elusive condition known as dust reticulation. In everyday language, reticulation refers to a net-like pattern. Dust reticulation was hastily included within the statutory definition of pneumoconiosis in 1943. The condition was identified in a study of coal miners carried out using a portable X-ray machine. It was soon discovered that, had higher-powered machines been used, a different legislative term would almost certainly have been used. Lung radiographs produced using higher-powered X-ray machines did not show the same net-like pattern. Despite that, today's statutory definition remains as enacted in 1943.
2. In this appeal, I have to decide what Parliament means by dust reticulation. I decide it means the underlying lung tissue changes which, on those portable X-ray machines, gave the impression of reticulation. That is, dust reticulation involves structural changes to lung tissue due to the accumulation of dust in widely distributed foci throughout the lungs. Nodularities need not be present nor is a medical diagnosis of fibrosis required. It follows that scarring associated with fibrosis need not be present either.
3. For living claimants, it is difficult to see how dust reticulation may be found in the absence of radiographs (X-rays) or some other scanning evidence. For claims made in respect of the deceased, however, post-mortem evidence may also be available. A case law theme, reflected in this case, is that decision makers have tended to overlook, or give insufficient weight, to post-mortem evidence. Statutory pneumoconiosis is only found if radiographs show those features which the International Labour Organisation considers reveals the presence of pneumoconiosis. As has previously been held, this is the wrong approach. All the evidence must be taken into account and it should not be assumed that radiological evidence must outweigh other evidence.

**Terminology**

*Pneumoconiosis*

4. “Pneumoconiosis” is derived from the Greek words for lung and dust. It also has a statutory definition and bears a generally accepted medical meaning. Problematically, the two are not aligned.

5. The statutory definition in section 122(1) of the Social Security Contributions and Benefits Act 1992 is “fibrosis of the lungs due to silica dust, asbestos dust, or other dust, and includes the condition of the lungs known as dust-reticulation”.

6. According to the current edition of the Oxford Textbook of Medicine, at part 18.13:

“Pneumoconiosis describes the pathological reaction of the lung to inhaled dust, which is most frequently, but not necessarily, one of fibrosis, and most often, but not exclusively, related to exposures occurring at work. It may be more formally defined as a permanent alteration of lung structure due to the inhalation of mineral dust and the tissue reactions of the lung to its presence, excluding bronchitis and emphysema.”

7. The medical profession recognise a milder form of pneumoconiosis variously referred to as coalworker’s, simple or coalworker’s simple pneumoconiosis. This is not generally considered disabling but may develop into a more serious form of pneumoconiosis referred to medically as complicated pneumoconiosis or massive progressive fibrosis.

8. To avoid confusion, these reasons refer to the 1992 Act definition of pneumoconiosis as statutory pneumoconiosis.

#### *Fibrosis*

9. “Fibrosis” is not defined by the 1992 Act but it has a settled medical meaning. According to the current edition of the Oxford Textbook of Medicine it means the formation of excessive fibrous connective tissue in an organ or tissue resulting in scarring or thickening.

#### *Dust reticulation*

10. “Dust reticulation” is no longer listed in the Oxford Textbook of Medicine as a symptom or sign of pneumoconiosis, nor is it defined by the 1992 Act. In lay terms, “reticulation” refers to “a pattern or arrangement of interlacing lines resembling a net” (the definition in the current Shorter Oxford English Dictionary).

#### *Opacities*

11. An opacity is a medical term used to describe a particular feature of lung radiographs. Opacities are areas that appear opaque or lacking in transparency.

### **Background**

12. During his working life, Mr S was employed in coal mines. Mr S sadly died on 10<sup>th</sup> December 2013. On 19<sup>th</sup> January 2014, his widow Mrs S made a posthumous claim for

Disablement Benefit (one of the industrial injury/disease benefits) in which she argued he had statutory pneumoconiosis at the date of his death.

13. Mrs S relied on a post mortem examination carried out on 13<sup>th</sup> December 2013. The report of the examining doctor (a consultant histopathologist) identified Mr S's causes of death in the following terms:

- “(1) (a) Acute myocardial infarction,  
(b) Coronary artery thrombus,  
(c) Coronary artery atherosclerosis.
- (2) Bronchopneumonia, chronic bronchitis and mild pneumoconiosis”.

14. These findings were explained in the ‘comment’ section of the report:

“While it is evident from the medical history and circumstances of death that Mr [S] developed multi-organ failure; it is clear from post mortem examination that a thrombus in the posterior coronary artery ultimately resulted in this death. Background chronic bronchitis, bronchopneumonia and minimal pneumoconiotic macules were identified.”

15. My understanding is that a “macule” is an area of tissue discolouration less than 1 cm. wide that is not palpable (i.e. not raised).

16. The report identified mild pneumoconiosis as a cause of death on the basis of its findings about Mr S's respiratory system at the date of death:

“The pleural cavities contained pleural fluid with up to 1 litre on the right side and 500 ml. on the left side. The trachea, bronchi and subsequent bronchopulmonary segments were patent. The lungs...showed evidence of significant pneumonia on a background of chronic bronchitis. Very mild pneumoconiotic macules were identified. There was no evidence of pulmonary embolism, haemorrhage, infarction or malignancy.”

17. Mr S's death certificate dated 30<sup>th</sup> December 2013 included amongst his causes of death “mild pneumoconiosis”.

18. A DWP medical adviser noted on 2<sup>nd</sup> April 2014 there was “no evidence of pneumoconiosis” on any of the X-rays or CT scans Mr S had before his death. Referring to the post-mortem findings, the adviser went on:

“I note the PM report noted “minimal pneumoconiotic macules”. I do not feel these were severe enough to manifest themselves as nodular opacities on [x-ray]. I therefore

do not feel the evidence for PDD1 (A) have been met in this case. The PM did not document the presence of pneumoconiotic nodules or fibroids”.

19. Relying on that advice, the Secretary of State refused Mrs S’s claim. She appealed to the First-tier Tribunal, arguing her late husband’s death certificate and post-mortem report “clearly cite pneumoconiosis as a cause of death” and “pneumoconiosis contributed towards my husband’s death and he was clearly therefore suffering from it”.

### **The First-tier Tribunal’s decision**

20. Following an oral hearing attended by Mrs S and members of her family, but at which she was unrepresented, the First-tier Tribunal on 11<sup>th</sup> February 2015 dismissed her appeal.

21. The First-tier Tribunal made the following findings:

(a) during Mr S’s working life, he was exposed to coal dust but “not everybody who has been exposed to coal dust during their working lives contracts pneumoconiosis”;

(b) “the existence of pneumoconiosis is generally determined by radiological evidence” (i.e. X-rays) but two chest X-rays and a chest CT scan in 2012 failed to detect any evidence of pneumoconiosis;

(c) “the existence of pneumoconiosis can also be determined on Post Mortem examination” but case law authority [*R(I) 3/03*] holds that “Tribunals cannot rely on “coal workers’ pneumoconiosis” in Post Mortem reports and death certificates as conclusive evidence that the statutory definition is satisfied”. The Tribunal also noted that, in this case, there were no histology reports (microscopic analysis of lung tissue);

(d) while Mr S’s post-mortem report did refer to very mild pneumoconiotic particles, there was “no evidence whatsoever of nodules or scarring of the lungs”. So far as the presence of pneumoconiotic macules was concerned, “dust macules...are likely to be found on any Post Mortem examination of anyone living in an industrial area who has never worked in a coal mine”;

(e) “the presence merely of macules does not begin to satisfy the statutory definition of [pneumoconiosis]”.

(f) the fact that the post-mortem report “did not document the presence of pneumoconiotic nodules or fibrosis are very relevant and important”. If such had been present, they would have been revealed on Mr S’s chest X-rays.

### **Proceedings before the Upper Tribunal**

22. Before the Upper Tribunal, Mrs S has had the good fortune to be represented by Mr Joe Power of Kirklees Law Centre. I granted Mrs S permission to appeal to the Upper Tribunal on the ground that the First-tier Tribunal may have overlooked the “dust reticulation” element of the statutory definition of pneumoconiosis. That argument was made by her representative

23. The Secretary of State’s initial response argued the term “dust reticulation” is “very out of date”. He cited a 1957 work *The Diseases of Occupations* by Donald Hunter which suggested that ‘dust reticulation’ was coined to describe radiological images produced using a portable X-ray machine but, if better quality machines were used, radiographs showed a “fine mottling” rather than a reticular network. Use of the term reticulation was liable to give rise to misunderstanding.

24. The 1987 edition of *The Diseases of Occupations* failed to mention reticulation at all and, instead, referred to the International Labour Organisation’s (ILO) classification scheme for diagnosing pneumoconiosis from opacities on lung radiographs. The Secretary of State said “the ILO classification is a standard way of assessing and grading small and/or large opacities seen in miners with coal workers’ pneumoconiosis”. He submitted:

“dust reticulation is an outdated term that is only used in the Industrial Injuries Scheme. By dust reticulation the Department used to mean the minimal X-ray changes seen in early cases of coal workers pneumoconiosis. The Department now assesses for the earliest changes using the ILO classification.

In my submission it is more appropriate to ask whether the claimant’s X-rays and CT films have been carefully assessed for small opacities using the ILO classification rather than whether dust reticulation has been accounted for”.

25. The Secretary of State also relied on the decision in *R(I) 3/03* (see below). The present tribunal found that “very mild pneumoconiotic macules” revealed by post-mortem examination did not satisfy the statutory definition of pneumoconiosis because neither scarring nor nodules were present. That finding was said to be consistent with *R (I) 3/03*.

26. Mrs S’s representative disagreed, arguing that the First-tier Tribunal’s approach effectively ignored the “dust reticulation” element of the statutory definition which was not permissible. It must add something.

27. I then gave further directions requiring the parties to make submissions on the relevance of the enacting history of the definition of “pneumoconiosis” and their views as to the pathological changes indicated by ‘dust reticulation’. I directed the parties’ attention to a 1948 article by Dr Fletcher of the Pneumoconiosis Research Unit which set out much of the enacting history of the statutory definition of pneumoconiosis. I also made the point that it was not immediately obvious, in the light of that history, why the dust reticulation element of the definition ought simply to be ignored. I also directed the Secretary of State to explain if, and

how, he considered the current ILO classifications ought to be used to identify ‘dust reticulation’.

28. The Secretary of State’s response was drafted with the assistance of a Departmental Medical Adviser Dr C Leris. I am grateful to Dr Leris for the time and obvious care she has devoted to the response, including investigation of Departmental archives. I granted the extensions of time sought by the Department for supply of their response to my directions. The Secretary of State submitted:

(a) “assessing for dust reticulation should be construed to mean that the x-rays have been carefully assessed for the smallest opacities using the ILO classification”;

(b) “following *CSI/79/1993*...DWP now uses [ILO] category 0/1 (normal with a few opacities that are less profuse than category 1) to diagnose PD D1” and had any opacities been visible on Mr S’s radiographs ...he would have been diagnosed with PD D1...SoS can be certain that an x-ray diagnosis of dust reticulation was not missed”;

(c) the Secretary of State accepted that all the evidence, not simply radiographs, must be assessed as a whole. He went on to submit that “a vital piece of information is missing from the post-mortem findings and that is the histology of the lung sections which could have been used to show that the claimant had the earliest changes associated with pneumoconiosis”. I note the First-tier Tribunal said no histology evidence was available in this case;

(d) an Industrial Injuries Advisory Council report of 1973 concluded that “improved radiographic techniques have shown that the radiological pattern of reticulation can in fact be resolved into the discrete opacities seen in simple coal workers’ pneumoconiosis”. However, the Council’s members could not agree on the underlying pathology (“microscopic physical changes”). The Secretary of State also referred to the 1974 work *Occupational Lung Diseases* by Parkes which stated that “net like opacities on chest x-rays”, while sometimes referred to as reticulation, was not “the proliferation of reticulin fibres” and “there is no correlation between the net-like opacities and reticulin fibres in the lungs”. From this, the Secretary of State concluded “clearly experts at the time thought dust reticulation in pathological terms and radiological terms were two different entities”;

(e) *Occupational Lung Diseases* also drew a medical distinction between fibrosis and presence of reticulin fibres: “fibrosis, by general agreement, means collagenous fibrosis and not proliferation of reticulin fibres”. The Secretary of State submitted:

“it is hard to know exactly what was in the minds of experts in the 1940s, 1950s and 1970s but it seems they meant the pathological definition of dust reticulation to include early appearances associated with tissue reaction to coal dust that would not necessarily be classified as fibrosis – fibrosis is crucial to the definition of pneumoconiosis under the scheme i.e. “pneumoconiosis means fibrosis of the lungs due

to...and includes the condition of the lungs known as dust reticulation”. There would be no need to add dust reticulation to the definition if the histological appearance of dust reticulation was encompassed by the term fibrosis””.

While not referred to, I observe that this conclusion mirrors that reached by Commissioner Mitchell Q.C. in *R(I) 7/98* (see below);

(f) the Secretary of State submitted “today’s medical advisers infer that the term dust reticulation in a pathological sense was used to enable claimants with histology that shows tissue reaction to dusts but no collagenous fibrosis to be diagnosed with pneumoconiosis in the context of the appropriate occupational history”;

(g) in conclusion, the Secretary of State submitted:

“further research into departmental archives has shown that there are two meanings of dust reticulation, one radiographic corresponding to ILO category of 1 of small opacities on chest x-ray and a pathological meaning indicating the presence of reticulin fibres and cellular lesions in histological sections of the lungs without fibrosis. In a practical sense, the SoS understands that dust reticulation is used in the regulations to enable claimants with the earliest signs of disease to be diagnosed with PD D1 based either on x-rays or histological findings”.

29. While the submission did not say so in terms, it seems to me that, as Mrs S’s representative argued, it provided tacit support for Mrs S’s appeal since the First-tier Tribunal relied on the absence of “pneumocotic nodules or fibrosis” in dismissing Mrs S’s appeal. The Secretary of State submitted a diagnosis of fibrosis was not required for dust reticulation to be made out. Mrs S’s representative invited the Upper Tribunal to set aside the First-tier Tribunal’s decision and remit to that tribunal for re-hearing. Neither party requested a hearing of the appeal and I do not consider a hearing necessary.

## **Legal framework**

### *“Pneumoconiosis”*

30. Pneumoconiosis is unique amongst industrial diseases in that it is defined in primary legislation. Section 122(1) of the Social Security Contributions and Benefits Act 1992 provides:

““pneumoconiosis” means fibrosis of the lungs due to silica dust, asbestos dust, or other dust, and includes the condition of the lungs known as dust-reticulation”

31. “Fibrosis” is not defined by the 1992 Act but I understand it has a settled medical meaning. According to the current edition of the Oxford Textbook of medicine it means the formation of excessive fibrous connective tissue in an organ or tissue resulting in scarring or thickening.

32. According to the current edition of the Oxford Textbook of Medicine, at part 18.13, current medical understanding is that:

“Pneumoconiosis describes the pathological reaction of the lung to inhaled dust, which is most frequently, but not necessarily, one of fibrosis, and most often, but not exclusively, related to exposures occurring at work. It may be more formally defined as a permanent alteration of lung structure due to the inhalation of mineral dust and the tissue reactions of the lung to its presence, excluding bronchitis and emphysema.”

33. “Dust reticulation” is a problematic term. It is no longer listed in the Oxford Textbook of Medicine as a symptom or sign of pneumoconiosis, nor is it defined by the 1992 Act. In lay terms, “reticulation” refers to “a pattern or arrangement of interlacing lines resembling a net” (according to the current Shorter Oxford English Dictionary).

*Case law authorities*

*R(I) 1/96*

34. In this case, Social Security Commissioner (now Upper Tribunal Judge) May Q.C. was also faced with a submission that the ILO classification of radiographs should be used to determine the existence of dust reticulation. He held “it is important not to confuse what is in effect a diagnostic aid with the diagnosis itself [i.e. the diagnosis of statutory pneumoconiosis]” and went on:

“9...The question before [the Tribunal] was not whether the claimant had what is described by them as certifiable coalworkers’ pneumoconiosis. The question before them was whether he had pneumoconiosis. The category in respect of which they found the radiological evidence to be placed was not the diagnosis but just an evidential factor to be used by the tribunal in applying, their expertise to the same question”.

35. The Commissioner also held the view that “minimal coalworker’s pneumoconiosis” was “insufficient radiologically” to amount to statutory pneumoconiosis” was wrong in law:

“9...This is in respect that first, if the claimant has pneumoconiosis, to whatever degree, then the diagnosis qualification for the benefit would be satisfied. Secondly that diagnosis qualification is not determined by a radiological category but a clinical diagnosis reached by expert assessment of the evidence presented to the person making it, including the radiological evidence and the categorisation of findings within what appears to be internationally recognised criteria”.

*R(I) 7/98*



36. This case concerned the “dust reticulation” element of the statutory definition of pneumoconiosis. An appeal tribunal had before it evidence that “both pathologists agreed that coal nodules were present in the deceased’s lungs and also agreed that the presence of dust *foci* in the lungs met the pathological definition of simple coalworkers pneumoconiosis”. Despite that, the tribunal decided that the claimant did not have statutory pneumoconiosis because there was no evidence of fibrosis.

37. Social Security Commissioner J.G. Mitchell Q.C. held (emphasis in the original):

“In my judgment the words “and includes the condition of the lungs known as dust-reticulation” is part of the definition of the relevant expression “pneumoconiosis” and must be regarded as significant in the construction of the intended scope of the definition. Thus in that context I consider that these words must carry the implication that dust-reticulation is to be regarded as a form of fibrosis of the lungs coming within the definition of prescribed disease D1, **whether or not** it would otherwise always be medically described as constituting fibrosis of the lungs.”

*R (I) 3/03*

38. *R(I) 3/03* was a decision of a Tribunal of Social Security Commissioners convened by the Chief Commissioner to consider “issues relating to the interpretation and application of the statutory definition [of pneumoconiosis] in the light of developments in medical understanding and terminology, particularly as they affect the evidence of the effects of coal dust obtained after death”. All four appellants and the Secretary of State were represented by counsel at the hearing of the appeals.

39. Each of the deceased had worked in coal mining and, after their deaths, a post-mortem was carried out by a Dr Kiberu. The post-mortem reports referred to “coal workers pneumoconiosis”. Dr Kiberu also produced histology reports but only his post mortem reports were supplied to the coroner. Acting on the advice of a Departmental Medical Advisers, the Secretary of State refused each claim concluding that none of the deceased had statutory pneumoconiosis.

40. The Tribunal of Commissioners noted that the definition of “pneumoconiosis” was recognised as unsatisfactory soon after its enactment in 1943 but was nevertheless retained. This created evidential difficulties because “medical evidence often does not reflect the statutory language”, difficulties that were most pronounced in relation to dust reticulation. On this point, the Tribunal of Commissioner’s described the medical evidence before them in the following terms:

“17...Both Dr Kiberu and Dr Wright agreed that this [i.e. dust reticulation] was no longer of significance. In so far as it refers to a radiological appearance, it is now recognised that it was produced by low quality x-rays. In so far as it refers to pathology, it is no longer a term that is used and it is unlikely to be of practical significance in pneumoconiosis cases”.

41. I think it is clear that, here, the Commissioners were simply describing the agreed medical evidence put before them. The Commissioners did not express disagreement with the evidence but that was not to be expected. They had to deal with the appeal as presented to them. Despite that, the headnote to the reported decision states that the Tribunal of Commissioners held “the term “dust reticulation” is no longer used and is unlikely to be of practical significance in pneumoconiosis cases”. My respectful view is that this was potentially misleading. The Tribunal of Commissioners did not hold that the “dust reticulation” element of the statutory definition could be ignored, as the Secretary of State’s first submission on this appeal seemed to assert. Such an interpretation would be contrary to the language used by the Tribunal of Commissioners elsewhere in its reasons as well as the decision of Commissioner Mitchell Q.C. which the Tribunal itself referred to and relied on.

42. In paragraph 18 of the Tribunal’s reasons, the language used shows they were not merely reciting the evidence but instead, making a finding:

“19. However, tribunals cannot rely on “coal workers pneumoconiosis” in post mortem reports and death certificates as conclusive that the statutory definition is satisfied. We have come to this conclusion for two reasons. First, experts differ in their use of the term. Dr Kiberu told us that by this he meant a disease process that involved fibrosis as a result of the retention of coal dust in the lungs. He said that, to his knowledge, this was standard usage among pathologists. Dr Wright did not accept the proposition that this condition always involved fibrosis. In his view, the reference to it had to be interpreted in its context of the other causes of death and conditions contributing to that cause. Second, even when a particular doctor’s use of the term is known, as Dr Kiberu’s now is, it is still only one doctor’s opinion, which must be assessed in the context of the evidence as a whole. Also, as Dr Kiberu admitted, in a post mortem report it is only a provisional conclusion that may be changed as a result of contrary findings on microscopic examination”.

43. The Tribunal of Commissioners went on, in paragraph 20, to stress the importance, as a matter of good practice, of tribunals obtaining available histology reports but, on my reading, the only general finding made was that in paragraph 19.

44. In all four cases, appeal tribunals decided statutory pneumoconiosis was not present. The Tribunal of Commissioners allowed three of the appeals and remitted them to the appeal tribunal for re-hearing:

- *Case 1*: the tribunal erred in law by failing to take into account a histology report;
- *Case 2*: – the appeal tribunal erred in law by treating the absence of supporting radiographs as determinative and by failing to explain why it did not seek available histology reports;
- *Case 3*: a radiograph showed “generalised background nodularity to both lung fields”. This indicated fibrosis might be present and the tribunal erred in law by failing to decide if it did or

not. And the tribunal also failed to take into account Dr Kiberu's histology report which found "emphysema associated scarring due to coal workers' pneumoconiosis".

- *Case 4*: the appeal in case 4 was withdrawn with the Tribunal's consent. Dr Kiberu's revised histology report was that there was no evidence of fibrosis. Withdrawal was permitted because "there is now no evidence of" statutory pneumoconiosis (although I note that in *R(I) 7/98* Commissioner Mitchell Q.C. held a medical diagnosis of fibrosis was not essential to a finding of statutory pneumoconiosis). The Tribunal added the case showed:

"We have referred to this case in some detail, because it supports us in our conclusion that no piece of evidence is necessarily conclusive. Even the opinion given in a post mortem report, on which a coroner's verdict is based, is open to reconsideration and change following findings on microscopic examination of tissue."

## **Industrial diseases legislation**

### *Disablement benefit*

45. Part V of the Social Security Contributions and Benefits Act 1992 provides for benefits in respect of industrial injuries (section 94) and applies those provisions to industrial diseases (section 108). There are a number of industrial injuries benefits including "disablement benefit" (sections 103 to 105 of the 1992 Act).

46. Section 108(1) of the 1992 Act provides that industrial injuries benefits, including disablement benefit, shall be payable in respect of a person who has been in employed earner's employment "in respect of (a) any prescribed disease...which is a disease...due to the nature of that employment". Diseases are prescribed in the Social Security (Prescribed Diseases) Regulations 1985.

47. Regulation 2(b) of the 1985 Regulations prescribes pneumoconiosis (as defined in the 1992 Act) in relation to, amongst other cases, "all persons who have been employed...in employed earner's employment in any occupation" set out in Part II of the Schedule to the Regulations. The occupations include "work underground in any mine in which one of the objects of the mining operations is the getting of any mineral".

48. Where regulation 2(b) applies, regulation 4(7) enacts a presumption that, in specified cases, "unless the contrary is proved" a person's pneumoconiosis is "due to the nature of that person's employed earner's employment". One specified case is where the person has been employed in a relevant occupation (such as coal mining) for not less than two years.

49. Section 103(1) of the 1992 Act requires a disablement benefit claimant to have an assessed disablement that "amounts to not less than 14 per cent". The 14 per cent threshold is always reached where a person has statutory pneumoconiosis due to the nature of a person's employed earner's employment because:

(a) regulation 20(1) of the 1985 Regulations provides that, where disablement benefit is claimed in respect of pneumoconiosis, the reference to “14 per cent” in section 103(1) is to be read as “1 per cent”; and

(b) Section 110 (3) of the 1992 Act provides that “a person found to be suffering from pneumoconiosis shall be treated for the purposes of this Act as suffering from a loss of faculty such that the assessed extent of the resulting disablement amounts is not less than 1 per cent”.

#### *Claims in respect of a deceased person*

50. Regulation 30(6A) of the Social Security (Claims and Payments) Regulations 1987 permits a claim for disablement benefit to be made “in the name of a person who has died” if the conditions in regulation 30(6B) are met. It is not disputed that the conditions are met in this case and that Mrs S was entitled to make a disablement benefit claim in the name of Mr S.

#### *Workmen’s compensation*

51. Statutory pneumoconiosis might also give rise to entitlement to a lump sum payment under the Pneumoconiosis (Workmen’s Compensation) Act 1979. I am unaware whether a claim for a payment has been made in this case but, in any event, there is no right of appeal to the First-tier Tribunal against decisions under the 1979 Act: see *Aviva Insurance plc v Secretary of State for Work & Pensions* [2016] AACR 29; [2015] UKUT 613 (AAC).

#### **The legislative history of statutory pneumoconiosis**

52. The present definition of “pneumoconiosis” was first enacted by the Workmen’s Compensation Act 1943 and has been used ever since in a succession of Acts dealing with workmen’s compensation and industrial injury and disease. The legislative history is potentially relevant because it may shed some light on the legal meaning of “pneumoconiosis” and “dust reticulation”. The parties were invited to make submissions as to the relevance of the enacting history in construing the statutory definition of pneumoconiosis.

53. I am satisfied that, in making my decision, I may take into account (a) Hansard reports of relevant Parliamentary debates (*Pepper (Inspector of Taxes) v Hart* [1993] AC 593; (b) relevant official reports (*Black-Cawson International Ltd v Papierwerke Waldhof-Aschaffenberg* [1975] AC 591); and (c) other aspects of the enacting history of the statutory definition of pneumoconiosis which I assume to have been within the contemplation of the legislature (*Pillai (Govindan Sellapah Nayar Kodakan) v Mudanyake (Puchi Banda)* [1953] AC 514).

#### *Why the Workmen’s Compensation Act 1943 was enacted*

54. The story begins with the Workmen’s Compensation Act 1897. This gave workmen a statutory right to recover compensation from their employers for injuries suffered in an accident at work. At this stage, no provision was made for industrial diseases unless they could be held due to an “accident”.

55. The Workmen's Compensation Act 1906 extended the statutory right to compensation to certain industrial diseases: anthrax, ankylostomiasis and poisoning by lead, mercury and phosphorus and arsenic. The Act also conferred power on the Secretary of State to bring other diseases within the compensation scheme.

56. Occupational lung diseases were not included in the compensation scheme in the early part of the twentieth century although a link between certain dusty occupations and lung disease had been suspected for some time. For example, in *De Re Metallica* (1556), the German physician Agricola wrote:

“some mines are so dry that that they are entirely devoid of water, and this causes the workmen even greater harm, for the dust which is stirred and beaten up by the digging penetrates into the windpipe and lungs, and produces difficulty in breathing. If the dust has corrosive qualities, it eats away the lungs and plants consumption in the body; hence the mines of the Carpathian mountains, women are found who have married seven husbands, all of whom this terrible consumption has carried off to a premature death”.

57. In this country, increasing attention was paid to an apparent correlation between mining occupations and lung disease in the late 19<sup>th</sup> and early 20<sup>th</sup> centuries. This is reflected in various official reports of the period.

58. In 1864, a Royal Commission – the Kinnaird Commission – was established to investigate and make recommendations about the health and safety of mines. It noted the high incidence of pulmonary disease amongst Cornish tin miners and lead miners in the North of England. The Commission referred to *De re Metallica* and also received evidence that dust in mines might cause lung abnormalities. For example, a mid-Wales surgeon Mr Rowland Rowland had discovered “minute particles of stony dust” in the black spittle of miners. Other medical advice, however, was that, if dust was a health risk, it could be easily be counteracted by miners themselves, for example by growing moustaches.

59. The Kinnaird Commission did not link dusty mines with the high prevalence of lung disease in certain miners. Instead “bad air” was considered the principal culprit and the resulting Act – the Metalliferous Mines Regulation Act 1872 – made no provision for reducing exposure to dust. The view has been expressed that “the incorrect conclusions of the Commission dominated official thinking about the cause of the mortality until the end of the century” (*The High Mortality of British Slate and Metal Miners and Beliefs about the Causes (1556 to 1904)*, R. A. Williams, British Mining No. 34 1987).

60. Various official committees towards the end of the nineteenth and early twentieth century identified a correlation between certain mining occupations and lung disease. In fact, the association seemed to become more pronounced over this period, thought to be due to new compressed air rock drills releasing greater quantities of dust. The breakthrough study was Professor John Scott Haldane's 1902 investigation into the health of Cornish tin miners. The

Professor had been asked by the Government to investigate, in particular, “the injurious effects alleged to be produced by...the dust arising from the use of rock drills”.

61. Professor Haldane’s 1904 *Report on the Health of Cornish Miners* concluded the “excessive death rate” amongst metal miners was “due solely to inhalation of stone dust” which “produces permanent injury of the lungs – gradually in the case of ordinary miners, and rapidly in the case of machine drill men”.

62. An immediate legislative response to the Haldane Report was not forthcoming although it did lead, as explained below, to official acceptance that certain dusty mines, but not necessarily coal mines, could cause lung diseases. In fact, Haldane himself wrote in 1927 that “the inhalation of coal dust causes no danger to life but on the contrary gives even protection against tuberculosis”

63. In 1907 the Committee on Compensation for Industrial Diseases advised the Secretary of State on whether to extend the ambit of the Workmen’s Compensation Act 1906. The Committee concluded that the lung condition ‘fibroid phthisis’ was an occupational disease of certain employments but due to difficulties in diagnosis did not recommend its inclusion in the Workmen’s Compensation Act scheme.

64. The 1907 Committee also rejected a link between coal mining and terminal lung disease in these terms:

“We are clearly of the opinion that coal miners are not subject to fibroid phthisis, and although cases of anthracosis, using the term to mean cases where the lung is charged with coal dust, are commonly met with, we cannot find that in anyone that condition has proved to be a contributory cause of death”.

65. Over the next decade, the Government considered whether to extend the compensation scheme to include dust-related industrial diseases. In 1914 the second report of the Royal Commission on Metalliferous Mines and Quarries was published. Relying on animal experimentation, the Commission concluded that silica dust had a “peculiarly injurious character” but that certain other dusts, including coal dust, had “not so far been shown to have been associated with excessive mortality from respiratory diseases”.

66. Parliament’s first response to dust-related occupational diseases came in 1918. But, rather than bringing such diseases within the existing compensation scheme, the Workmen’s Compensation Act 1918 authorised the Secretary of State to make a separate compensation scheme for workers exposed to silica dust.

67. A single compensation scheme was made under the Act, the Refractories Industries (Silicosis) Scheme 1919. Following amendment in 1920, this provided for payment of compensation met from an industry levy, for workers suffering from silicosis, or silicosis accompanied by tuberculosis, to such a degree as to make it dangerous to continue in the industry. The only miners eligible under the scheme were miners of ganister (a quartzite used in

manufacturing silica bricks). The definition of “refractory industry” referred to a process in which “material containing not less than 80% of silica...is got or manipulated”. A workman paid compensation under the scheme was also suspended from working in a refractory industry.

68. The 1918 Act was amended by the Workmen’s Compensation (Silicosis) Act 1924. This defined silicosis as fibrosis of the lungs due to silica dust. As enacted, the 1918 Act did not define “silicosis” but, medically, I understand silicosis is considered to be a type of pneumoconiosis.

69. In 1924 a Departmental Committee reported on the operation of the 1919 silicosis scheme. It criticised aspects of the scheme and its practical application, including its failure to exclude workmen who, while showing signs of silicosis, were not disabled, as well as the low use by appointed medical officers of their powers to X-ray workmen’s chests. X-rays were obtained in only 2.5% of claims decided by medical officers.

70. The Government’s response was a re-drafted Refractories Industries (Silicosis) Scheme 1925. This established a full-time board of medical officers with power to arrange for a radiological examination in any case. The suspension from employment provisions were also re-drafted so that the Medical Board was only required to suspend where a workman was suffering from silicosis “to such a degree as to make it dangerous for him to continue to work”. The Scheme did not, however, require presence of actual disability.

71. The Workmen’s Compensation Act 1927 enabled the Secretary of State to apply the existing refractory industries scheme model to other industries. The Various Industries Scheme 1928 extended the compensation scheme to include mining of silica rock (rock with at least 50% free silica content).

72. In 1930, the 1928 scheme was amended specifically for the benefit of coal miners whose work involved drilling and blasting silica rock incidental to the getting of coal. A requirement for rock to contain at least 50% free silica content was also omitted. In 1934, the scheme was further amended to omit the requirement for a workman to be involved in mining silica rock. Instead, the relevant operation became “any operation underground in any coal mine” although the sole compensatable disease remained silicosis.

73. The Various Industries (Silicosis) Scheme 1931 extended the compensation scheme once more to include workmen who “though not totally disabled are suffering from silicosis or from silicosis accompanied by tuberculosis to such a degree as to make it dangerous for them to continue work in the processes and for that reason were suspended from the employment”.

74. During the 1930s it seems to have become increasingly clear that some coal miners, especially those working on the anthracite coal seams of South Wales, were afflicted by an occupational lung disease other than silicosis. The Government commissioned the Industrial

Pulmonary Diseases Committee of the Medical Research Council to investigate. Messrs. Hart and Aslett carried out extensive field work between 1940 and 1942 using a portable X-ray machine.

75. Until 1940, the silicosis compensation schemes remained apart from the Workmen's Compensation Act scheme. Provision was made for their unification by the Workmen's Compensation (Supplementary Allowances) (No.2) Act 1940 but the Act did not extend the right to compensation beyond silicosis. However, Parliamentary debates on the Bill which led to the Act show that members were aware of the ongoing Medical Research Council study and that it might lead to an extension of the right to compensation to other occupational lung diseases. Jim Griffiths M.P. speaking during the Commons committee debates said:

“there is going on a special investigation into the problem of silicosis among coalminers. It is a very thorough investigation, and I should like to pay a tribute to those who were appointed by the Medical Research Council to conduct that investigation...For the moment we are quiet because we want them to have full time in which to make their investigations. Of course we hope there will be no undue delay, and that no time will be lost in bringing out their report, and when that report does come to hand the first thing to do will be to end the use of the absurd term silicosis. Men are now contracting all sorts of chest diseases from the dust...”. [Hansard *HC Deb 25 July 1940 vol 363 1107*]

76. Hart and Aslett's 1942 report led directly to the statutory definition of pneumoconiosis which still applies today. Hart and Aslett concluded “there was a serious incidence of radiological abnormalities among coal-face workers, similar to those seen in cases of silicosis, which must be attributed to the inhalation of coal dust”.

77. Hart and Aslett reported a particular radiological abnormality which they described as a “fine network, sometimes sharp and lacelike in pattern, but much more often blurred in appearance”. They dubbed this reticulation. Dr Fletcher's 1948 article (see below) states this was thought to fall outside the existing compensation scheme because it was not nodular in appearance. The Industrial Diseases Committee then recommended that, for compensation purposes, pneumoconiosis should be taken to include reticulation.

78. We now come to the Workmen's Compensation Act 1943. According to the Minister in charge of the Bill in the House of Commons, its purpose was to:

“make provision for an industrial disease which has been the subject of an inquiry by a committee of the Medical Research Council which was begun in 1936. Since the Silicosis Scheme of 1929 was extended to apply to all underground workers in coal mines in 1934 the number of claims for compensation has steadily increased, and it was noticed as long ago as 1936 that the proportion of applications in which certificates were refused by the Medical Board was increasing also. This fact among others led to a suspicion that some other pulmonary disease existed among underground workers in



coalmines which could not be said to be caused by silica dust but which, nevertheless, was due to the employment.

The result of the medical inquiry was published early this year. It is exhaustive and, to the lay mind at any rate, conclusive. The investigations of the committee have established the existence of a form of pneumoconiosis, which differs from silicosis and cannot be said on present information to be due to silica dust. It can be distinguished by both radiological and pathological methods, and it is due to inhalation of airborne dust in the course of employment.

...The purpose of Clause 1 of the Bill is to extend Section 47 of the Act of 1925, which enables compensation schemes to be made for fibrosis of the lungs due to silica dust or asbestos dust, so as to enable schemes to be made for any form of pneumoconiosis.”

79. It is quite clear that a purpose of the 1943 Act was to make reticulation a compensatable disease. Since the 1943 Act was a direct response to the report, I shall set out the report’s principal findings:

(a) on the basis of their X-ray findings, Hart and Aslett identified three categories of radiological lung presentation: (i) normal; (ii) reticulation; and (iii) consolidation. The consolidation category was further sub-divided into nodulation and more advanced stages. Reticulation was an intermediate category between normal lungs and the consolidation stage but differed little from the nodulation sub-division. Reticulation and the later more advanced abnormalities were “related in pathological development as well as being connected in time sequence”

(b) the report described reticulation as often benign:

“Reticulation appears to indicate a condition of the lungs which may cause respiratory disability, but this occurs mainly in middle-aged and older men. As a corollary, a fairly considerable proportion of men showing reticulation will have no detectable disability, as will also some men with nodulation. In fact, only in the men with most advanced changes is there full agreement between the X-ray changes and the clinical evidence of disability”;

(c) the report recommended adoption of a new term, namely “pneumoconiosis in coal workers” which was to include reticulation, i.e. to include non-nodular changes;

(d) the criteria for diagnosing pneumoconiosis should be (i) “positive X-ray findings of a definite character”; and (ii) “presence of disability”;

(e) the report also gave an account of the pathology thought to underly the radiological feature dubbed reticulation as “a diffuse network of reticulin fibrosis, enmeshing without redundancy, the deposits of coal dust in the lungs”. The 1943 Act, however, simply referred to “the condition of the lungs known as dust reticulation”.

80. The new Act soon came under scrutiny because many coal workers were found eligible under the new scheme (and suspended from coal mining work, at a time when maintenance of coal production was important to the war effort and post-war recovery).

81. On 29<sup>th</sup> May 1948, the British Medical Journal published an influential two-part article by Dr C M Fletcher, Director of the Pneumoconiosis Research Unit of the Medical Research Council (MRC), i.e. the organisation responsible for Hart & Aslett study. I say this article was influential because I suspect it was the source of the subsequent view that the study was flawed. However, I think that is a misreading of Dr Fletcher's views.

82. Entitled *Pneumoconiosis of Coal Miners*, Dr Fletcher's article made the following points:

(a) of the 17,000 South Wales coal miners certified as suffering from pneumoconiosis or silicosis and suspended from work in the previous 15 years, 10,000 were so certified in the previous three years (i.e. following enactment of the statutory definition of pneumoconiosis);

(b) Hart and Aslett had to use a portable X-ray machine which meant their radiograph images were relatively imprecise. Using the MRC's high-definition X-ray machines, the feature dubbed reticulation was described instead as "a fine mottling whose main components are usually less than 1 mm. in character but may reach twice that size. For this appearance we have, for the time being, used the term pin-head mottling";

(c) this pin-head mottling was often associated with a form of coarser mottling. At first sight, radiographs of this condition might appear nodular but, on closer inspection, "the nodules can be seen to be composed of aggregates of pin-head mottling";

(d) the MRC did not favour using the term "network" to describe either feature but did not propose abandoning the term "reticulation" because it "has proved useful in emphasising the differences between the early stages of coal miners' pneumoconiosis and those of classical silicosis";

(e) Dr Fletcher addressed the complications arising from the statutory definition of pneumoconiosis having included 'dust reticulation':

"A more serious practical difficulty than that of terminology arises from the fact that reticulation has to be considered as a definable condition for the purpose of decisions concerning compensation. It is obvious that the condition may in fact gradually develop from normality but, unlike nodulation, in which it may be possible to define a minimum number and size of nodules for such purposes, reticulation cannot be assessed numerically, and it appears to develop only by a gradual increase of intensity. Hart and Aslett gave no guide to the degree of abnormality required for a confident diagnosis of reticulation to be made".

83. In subsequent years, legislators have seemed well aware that the statutory definition of pneumoconiosis, in particular the dust reticulation element, caused practical difficulties.

Nevertheless, the Government has declined to bring forward legislation to alter the statutory definition.

84. In 1953 the Industrial Injuries Advisory Council advised the Secretary of State not to alter the statutory definition of pneumoconiosis. The 1953 report also expressed the view that ““dust reticulation” has always been meant to denote a pathological condition of the lungs” but “was sometimes wrongly taken to be a description of radiographic appearances”.

85. In 1973 the Industrial Injuries Advisory Council produced for the Secretary of State, under section 62 of the National Insurance (Industrial Injuries) Act 1965, an extensive report *Pneumoconiosis and Byssinosis* (cmd. 5443). The Secretary of State had asked the Council to advise him on whether “in the light of experience and current knowledge any adjustment should be made in the definition of pneumoconiosis in the National Insurance (Industrial Injuries) Act 1965”. The report drew extensively on work carried out by the Medical Research Council’s Pneumoconiosis Research Unit

86. The 1973 report made the following findings and recommendations:

(a) most experts held “the view that simple pneumoconiosis of coalworkers is not as disabling as was previously thought and that simple pneumoconiosis itself, as diagnosed in life from the chest radiograph, has no demonstrable effect on the expectation of life” (para. 21). And “while simple pneumoconiosis is a precursor of the more serious condition of miners of complicated pneumoconiosis (progressive massive fibrosis) the proportion of miners progressing to this latter form is small” (para. 22);

(b) “It is generally agreed from the study of pathological evidence that simple pneumoconiosis is not usually associated with appreciable fibrosis, though there are structural changes which result from the accumulation of the dust into many widely distributed foci throughout the lungs: these foci are generally believed to be the cause of the small rounded opacities seen on the radiograph” (para. 22);

(c) “simple pneumoconiosis of coal workers is characterised by small, discrete dust foci scattered throughout the lungs” and “complicated pneumoconiosis, also known as massive progressive fibrosis, only occurs in the presence of simple pneumoconiosis. Complicated pneumoconiosis is characterised by much larger and localised aggregations of dust with associated tissue changes, including fibrosis in parts of the legion, though recent research has shown that much of the mass is composed of altered proteins and other substances rather than fibrous tissue” (para. 38);

(d) the Council rejected the argument that “pneumoconiosis” should not be statutorily defined because “pneumoconiosis undefined is a broad generic term used to describe the various effects that retained dust has on the lung and there are significant differences among medical authorities as to the conditions which should be regarded as covered by it” (para. 55);

(e) “where the doctors of the [pneumoconiosis medical panels] first diagnose the disease in coalworkers they may be doing so in the absence of fibrosis although undoubtedly the

condition they identify is dust-induced. We are strongly of the opinion that the panels' diagnostic criteria should be maintained..." (para. 58). However, the Council also recommended that "dust reticulation...should be omitted from the definition of pneumoconiosis, either because of the confusion as to what it means or because it was obsolete (para. 64). The Council also noted, as it did in its 1953 report, that some medical authorities continued wrongly to assume that "dust reticulation was a radiographic appearance rather than a pathological condition";

(f) following enactment of the 1943 Act, the term dust reticulation "was applied by some medical authorities to describe both a radiological and a pathological feature of simple coalworker's pneumoconiosis, which were referred to as "X-ray reticulation" and "dust reticulation" respectively. The two presentations were thought to correspond. However, later research "showed that pathological appearances cannot be predicted precisely from chest radiographs in coalworker's pneumoconiosis. Improved radiographic techniques have shown that the radiological pattern of reticulation can in fact be resolved into the discrete opacities seen in simple coalworker' pneumoconiosis". Nevertheless, "radiography has a vital part to play in the diagnosis of pneumoconiosis" and x-rays should be interpreted by reference to "international standards" (para. 102);

(g) the Council recommended a new statutory definition of pneumoconiosis which omitted dust reticulation: "permanent alteration of lung structure due to the inhalation of mineral dust and the tissue reactions of the lung to its presence but does not include bronchitis and emphysema". However, this recommendation was not adopted by the Government.

### *Themes*

87. The enacting history reveals the following:

(a) until the early part of the twentieth century, it was mistakenly thought that coal mining did not cause lung diseases;

(b) as medical knowledge advanced, the industrial diseases legislation was incrementally extended to cover certain mining occupations and their linked lung diseases. It became increasingly apparent that earlier medical views about the respiratory safety of coal mining were wrong;

(c) Hart and Aslett's 1942 report led directly and rapidly to the enactment of the statutory definition of pneumoconiosis. Their report had identified an early-stage lung abnormality which they called reticulation and which was not thought to be nodular in character;

(d) Hart and Aslett's conclusions were based on radiological lung abnormalities. Their radiographs were produced using a portable X-ray machine which suggested that the abnormality was reticulate or network-like in character. Had more powerful machines been used, it is unlikely they would have dubbed the feature identified as reticulation. But, once this had become apparent, "dust reticulation" was already on the statute book;

(e) one can only speculate as to Parliament's reasons for deciding so rapidly to enshrine in legislation a newly-discovered lung condition. Legislators might have thought coal miners were unjustly excluded from earlier Workmen's Compensation Acts since for many years the flawed medical view that coal mining had little injurious effect on the lungs held sway. Parliament's decision may also have been connected to the dynamics of the wartime coalition government or the importance to the war effort of maintaining morale amongst coal miners. Whatever the reason, Parliament decided to enshrine in legislation a little-researched and newly-discovered lung condition;

(f) Hart and Aslett proposed a definition that incorporated a radiological finding and the presence of disability. However, this was not adopted by the 1943 Act which simply referred to "dust reticulation";

(g) The Government has resisted calls to bring forward legislation to alter the statutory definition of pneumoconiosis despite its awareness that, medically, dust reticulation is a misnomer;

(h) decision-makers have consistently tended to overlook that dust reticulation is a pathological condition, assuming instead that is simply a type of radiographic lung abnormality.

### **General findings**

#### *What is dust reticulation?*

88. Hart & Aslett identified a type of lung abnormality using X-rays. However, the radiograph is not the industrial disease. It is simply evidence of the disease. This was accepted by the Minister in charge of the Bill which led to the 1943 Act (see paragraph 78 above). It was also so held by Social Security Commissioner May Q.C. in *R (I) 1/96*. It follows that dust reticulation may be found to exist in the absence of radiological evidence. It is, however, obvious that, in the living, the only evidence on which a finding of dust reticulation is likely to be made is an X-ray or some other scan of the lungs.

89. The limitations of Hart & Aslett's X-ray machines led them inaccurately to describe the pathology as reticulate in character. That inaccurate description was adopted by Parliament in the 1943 Act.

90. Parliament did not simply make a mistake and enact a dead letter that may be ignored. The enacting history shows its intention must have been to include within the definition of pneumoconiosis the pathological feature identified by Hart & Aslett but inaccurately dubbed reticulation. As Bennion on Statutory Interpretation puts it at p.788 "it is presumed that the legislator intends the court to apply a construction which rectifies any error in the drafting of the enactment, where it is required in order to give effect to the legislator's intention (approved in *R (Zenovics) v Secretary of State for the Home Department* [2002] EWCA Civ 273, [2002] EWCA Civ 273).

91. Parliament has had many opportunities to re-draft the definition of pneumoconiosis so as to omit “dust reticulation”. It has declined to alter the definition even though it has for some time been generally accepted by the medical profession that “dust reticulation” inaccurately described the pathological feature revealed on Hart & Aslett’s radiographs.

92. It has always been accepted that dust reticulation may be benign (have no appreciable effect on lung function). Today, no actual disablement need be present for entitlement to disablement benefit to arise (see paragraph 49 above).

93. There is no need for fibrosis to be present in order for “dust reticulation” to exist (*R(I) 7/98*). Nodularities do not need to be present either. Hart & Aslett were clear that the condition they identified was a pre-cursor to the development of nodularities so that Parliament cannot have intended nodularities to be present in order for dust reticulation to be made out.

94. What, then, was the pathological feature that Parliament had in mind in 1943, and which it gave the name dust reticulation? Hart and Aslett identified a spectrum of lung abnormalities. Reticulation was the first stage and it preceded formation of nodularities. The 1973 Council report shed further light:

“It is generally agreed from the study of pathological evidence that simple pneumoconiosis is not usually associated with appreciable fibrosis, though there are structural changes which result from the accumulation of the dust into many widely distributed foci throughout the lungs: these foci are generally believed to be the cause of the small rounded opacities seen on the radiograph... the radiological pattern of reticulation can in fact be resolved into the discrete opacities seen in simple coalworker’ pneumoconiosis” (para. 22);

95. In my view, this must have been what Parliament had in mind when it included “dust reticulation” within the definition of pneumoconiosis. Small rounded opacities did not appear on Hart & Aslett’s radiographs, since they used a low power portable X-ray machine, but they would have had higher powered machines been used. Both radiological presentations reflect the same physical changes to lung tissue and that is the legal meaning of dust reticulation under the 1992 Act. The exact nature of the structural changes is uncertain, according to the Secretary of State’s submissions, but that does not matter for present purposes. All that matters is that structural changes to lung tissue have resulted from accumulation of dust into widely distributed foci in the lungs.

96. To conclude, dust reticulation involves structural changes to lung tissue due to the accumulation of dust in widely distributed foci throughout the lungs. Nodularities need not be present nor is a medical diagnosis of fibrosis required and, it follows, scarring need not be present either. In the living, it is difficult to see how dust reticulation may be found in the absence of X-ray or scanning evidence but, for the deceased, post-mortem evidence may also demonstrate the existence of dust reticulation. In my view, the above discussion also shows that a diagnosis of simple or coal worker’s pneumoconiosis will often show that dust reticulation is made out. I do not, however, make a ruling to that effect because that would

usurp the First-tier Tribunal's function of deciding, in the light of all relevant evidence in a particular case, whether statutory dust reticulation is made out.

### **Why the First-tier Tribunal erred in law**

97. The First-tier Tribunal, in dismissing Mrs S's appeal, relied on there being "no evidence whatsoever of nodules or scarring of the lungs". In this respect, the Tribunal erred in law. Neither nodules nor scarring/fibrosis need be present in order for dust reticulation (and hence statutory pneumoconiosis) to be made out.

98. The First-tier Tribunal also made the point that "dust macules...are likely to be found on any Post Mortem examination of anyone living in an industrial area who has never worked in a coal mine". If so, and the macules would otherwise amount to dust reticulation, the disablement benefit criteria would not be met. This is because the disease would not be due to the nature of a person's employment in a prescribed occupation. The First-tier Tribunal seems to have overlooked this feature of the industrial injuries/diseases scheme.

99. The First-tier Tribunal's decision is set aside for error of law and Mrs S's appeal is remitted to the First-tier Tribunal for re-hearing.

### **Directions for re-hearing**

**Subject to any later Directions by a District or Regional Tribunal Judge of the First-tier Tribunal, I direct as follows:**

- (1) The First-tier Tribunal must reconsider, following a re-hearing, Mrs S's appeal against the Secretary of State's decision that, at his death, Mr S did not have statutory pneumoconiosis. The membership of this Tribunal must not include anyone who was a member of the Tribunal whose decision I have set aside.
- (2) The First-tier Tribunal that reconsiders Mr P's appeal must not take into account, in its reasoning, the findings or reasoning of the Tribunal whose decision I have set aside.
- (3) The First-tier Tribunal must apply the legal meaning of dust reticulation set out in paragraph 96 of the above reasons.
- (4) Listing is a matter for the First-tier Tribunal but it may wish to consider including within the panel a medical member with a specialism in respiratory medicine. I recommend that the file is put before a regional judge to determine listing and other case management arrangements.
- (5) Within one month of the date on which this decision is issued, the parties must supply the First-tier Tribunal with any further documentary evidence or argument on which they wish to rely.

**(Signed on the Original)**

E Mitchell  
**Judge of the Upper Tribunal**  
**19 October 2016**