Michaelmas Term
[2014] UKSC 53
On appeal from [2013] EWCA Civ 1346

JUDGMENT

UKSC 2013/0267
McDonald (Deceased) (Represented by Mrs Edna McDonald) (Respondent)
v
National Grid Electricity Transmission Plc (Appellant)

UKSC 2013/0263
McDonald (Deceased) (Represented by Mrs Edna McDonald) (Appellant)
v
National Grid Electricity Transmission Plc (Respondent)

before

Lord Neuberger
Lady Hale
Lord Kerr
Lord Clarke
Lord Reed

JUDGMENT GIVEN ON

22 October 2014

Heard on 12 and 13 February 2014

Appellant	*Respondent*
Dominic Nolan QC Philip Godfrey (Instructed by Damon Burt, Plexus Law)	David Allan QC Simon Kilvington (Instructed by Satpal Singh, Irwin Mitchell LLP)

LORD KERR

Introduction

1. Percy McDonald was diagnosed as suffering from mesothelioma in July 2012. Sadly, at the beginning of February 2014, just before the appeal in his case was due to be heard by this court, Mr McDonald died. His widow, Edna McDonald, has been substituted as respondent in the appeal. The period between diagnosis and death in Mr McDonald's case is entirely consistent with experience of this insidious disease. Survival for no more than a period of months after diagnosis is the almost invariable outcome.

2. Mesothelioma is a form of cancer that develops from cells of the mesothelium, the protective lining that covers many of the internal organs of the body. It usually affects the pleura, the outer lining of the lungs and the internal chest wall. It is most commonly caused by exposure to asbestos. Symptoms or signs of mesothelioma may not appear until 50 years (or more) after exposure.

3. Mr McDonald was employed by a firm known as Building Research Establishment, operated by the government. Between 1954 and March 1959 he attended Battersea power station in the course of his employment. This was for the purpose of collecting pulverised fuel ash. Between 1954 and January 1957 he was at the power station approximately twice a month. Between January 1957 and March 1959 he was there about twice every three months. The plant where the ash was collected did not contain asbestos. But Mr McDonald, while visiting the power station, went into other areas where asbestos dust was generated by lagging work. This happened particularly in the boiler house. It is suggested by the appellant that his visits to these areas took place because of curiosity on his part or because he was on friendly terms with workers employed there. At the times he was exposed to asbestos, Mr McDonald was, the appellant's counsel, Mr Nolan QC, suggested, a "sightseer" or an "interested visitor".

4. The lagging work involved mixing asbestos powder with water in large drums in order to make a paste. It also included the sawing of preformed asbestos sections and the stripping off of old asbestos lagging. On occasions Mr McDonald walked through dried asbestos paste. The trial judge found that his exposure to asbestos was "of a modest level on a limited number of occasions over a relatively short period of time … [and] … was not greater

than those levels thought of in the 1950s and 1960s as being unlikely to pose any real risk to health".

5. The appellant is the successor body to the occupiers of the power station and, at trial, Mr McDonald alleged that those occupiers were negligent and in breach of their statutory obligations under regulation 2(a) of the Asbestos Industry Regulations 1931 and section 47 of the Factories Act 1937. He also claimed against his employers that they had been guilty of negligence. The trial judge, His Honour Judge Denyer QC, dismissed all the claims against both defendants. On appeal, the Court of Appeal allowed Mr McDonald's appeal under the 1931 Regulations but dismissed his appeal under the 1937 Act and in negligence. The appellant appeals to this court against the judgment under the 1931 Regulations and Mrs McDonald cross appeals against the dismissal of her husband's claim under section 47 of the 1937 Act. Negligence is no longer in issue.

The Asbestos Industry Regulations 1931

6. These Regulations were made pursuant to the provisions of the Factory and Workshop Act 1901, section 79 of which provided:

> "Where the Secretary of State is satisfied that any manufacture, machinery, plant, process or description of manual labour, used in factories or workshops, is dangerous or injurious to health or dangerous to life or limb, either generally or in the case of women, children or any other class of persons, he may certify that manufacture, machinery, plant, process or description of manual labour to be dangerous; and thereupon the Secretary of State may, subject to the provisions of this Act, make such regulations as appear to him to be reasonably practicable and to meet the necessity of the case."

7. In a letter of 15 September 1931 the Secretary of State indicated that he would use his powers under this section and he enclosed a draft of the Regulations that he proposed to make "for the protection of the workers employed in certain processes involving exposure to asbestos dust". He gave notice in the letter that he had "formally certified as dangerous the manipulation of asbestos and the manufacture or repair of articles composed wholly or partly of asbestos and processes incidental thereto …" The letter further intimated that the Secretary of State had decided to give effect to recommendations contained in two reports, "Effects of Asbestos Dust on the Lungs and Dust Suppression in the Asbestos Industry" by Merewether and Price published in

March 1930 and the Report of Conferences between Employers and Inspectors concerning Methods for Suppressing Dust in Asbestos Textile Factories, which had been published shortly before the Secretary of State's letter was sent. That letter continued:

> "The draft Regulations follow generally the provisions recommended in the two Reports already mentioned, with certain additions and modifications which have been made after taking into consideration observations submitted by the General Council of the Trades Union Congress."

8. Section 82(1) of the 1901 Act provided:

> "The regulations made under the foregoing provisions of this Act may apply to all the factories and workshops in which the manufacture, machinery, plant, process or description of manual labour, certified to be dangerous, is used (whether existing at the time when the regulations are made or afterwards established) or to any specified class of such factories or workshops. They may provide for the exemption of any specified class of factories or workshops either absolutely or subject to conditions."

9. The breadth of the anticipated application of the Regulations should be noted. This subsection foreshadowed their application to a wide range of processes. It also presaged that processes etc which did not exist at the time the Regulations were made could come within their embrace when later established. The potentially wide scope of the Regulations was also reflected in section 83 of the Act which provided:

> "... Regulations made under the foregoing provisions of this Act may, among other things - ... (b) prohibit, limit or control the use of any material or process;"

10. This broadly based theme was continued in the text of the Regulations themselves. In the preamble it was directed that they were to apply to

> "… all factories and workshops or parts thereof in which the following processes or any of them are carried on:-

> (i) breaking, crushing, disintegrating, opening and grinding of asbestos, and the mixing or sieving of asbestos, and all processes involving manipulation of asbestos incidental thereto;
>
> (ii) all processes in the manufacture of asbestos textiles, including preparatory and finishing processes;
>
> (iii) the making of insulation slabs or sections, composed wholly or partly of asbestos, and processes incidental thereto;
>
> (iv) the making or repairing of insulating mattresses, composed wholly or partly of asbestos, and processes incidental thereto;
>
> (v) sawing, grinding, turning, abrading and polishing, in the dry state, of articles composed wholly or partly of asbestos in the manufacture of such articles;
>
> (vi) the cleaning of any chambers, fixtures and appliances for the collection of asbestos dust produced in any of the foregoing processes."

11. The extent of the potential application of the Regulations was mitigated by a proviso to the preamble which was in the following terms:

> "Provided that nothing in these Regulations shall apply to any factory or workshop or part thereof in which the process of mixing of asbestos or repair of insulating mattresses or any process specified in (v) or any cleaning of machinery or other plant used in connection with any process, is carried on, so long as (a) such process or work is carried on occasionally only and no person is employed therein for more than eight hours in any week; and (b) no other process specified in the foregoing paragraphs is carried on."

12. Although this proviso cut down the scope of the Regulations, it gives some insight into the width of their intended ambit. It carried the clear implication that the Regulations applied even if the main business of the factory or

workshop was not the manufacture of asbestos goods. Moreover, the processes identified in the preamble, other than those listed in the proviso, were to come within the Regulations even if the work involved in them took place only occasionally or for limited periods. Also, in relation to those processes listed in the proviso, including mixing, the Regulations were to apply unless the work was carried out occasionally and no person undertook it for more than 8 hours a week. A further proviso, not directly relevant for present purposes, permitted the chief inspector of factories to suspend or relax the Regulations, if satisfied that, by reason of the restricted use of asbestos or the methods of working, they could be suspended or relaxed without danger to those employed. I say that this is not directly relevant but it is pertinent to note that one of the circumstances in which the suspension or relaxation might be authorised was that the use of asbestos was restricted. If, as the appellant claims, the Regulations applied only to the industry engaged in the manufacture of asbestos, it is difficult to see how circumstances could arise in which asbestos use within such an industry would be restricted.

13. The preamble stipulated that it was the duty of the occupier of factory or workshop premises to observe Part I of the Regulations. Regulation 2 (which was in Part I) provided:

> "2. (a) Mixing or blending by hand of *asbestos* shall not be carried on except with an exhaust draught effected by mechanical means so designed and maintained as to ensure as far as practicable the suppression of dust during the processes.
>
> (b) If premises which are constructed or re-constructed after the date of these Regulations the mixing or blending by hand of *asbestos* shall not be done except in a special room or place in which no other work is ordinarily carried on."

14. Asbestos was defined in the Regulations as meaning "any fibrous silicate mineral, and any admixture containing any such mineral, whether crude, crushed or opened". Crude asbestos was the raw mineral as shipped in containers after it had been mined. Crushed or opened material referred to its condition after it had undergone processes preparatory to its use. The Regulations defined preparing as meaning "crushing, disintegrating, and any other process in or incidental to the opening of asbestos".

The background to the1931 Regulations

15. The parties are agreed that the Merewether and Price Report forms part of the background against which the 1931 Regulations were made and is therefore indispensable to any examination of their ambit. The respondent claims that further material considerations include (i) the relevant provisions of the 1901 Act; (ii) the Secretary of State's certification pursuant to section 79; (iii) the processes listed in the preamble; and (iv) the definition of asbestos in the Regulations. The appellant contends that the Report on Conferences and the discussions which led to it also played a significant part in the shaping of the terms of the 1931 Regulations and that these must also be considered. It has not been suggested by the respondent that this report should not be taken into account.

16. The appellant points to two other sources which, it claims, provide material germane to a consideration of the intended scope of the Regulations. The first of these is a report entitled "Problems arising from the use of Asbestos" – Ministry of Labour HM Factory Inspectorate November 1967 (36-316). This suggested that the 1931 Regulations "[did] not apply to lagging and insulation operations using asbestos". The respondent objects to any reference to this document on the ground that it did not feature in the case until the hearing before this court. The second source identified by the appellant consists of material relating to the Parliamentary history of the Regulations. This material demonstrates, the appellant argues, that Parliament's perspective was that the 1931 Regulations applied only to the asbestos industry. The respondent contends that it is not permissible to refer to this material because the conditions prescribed by *Pepper v Hart* [1993] AC 593 as to the admissibility of statements made in Parliament are not satisfied. It is also submitted that the references in Hansard do not, in any event, assist in determining the scope of the Regulations.

Section 47(1) of the Factories Act 1937

17. Section 47(1) of the 1937 Act provided:

> "In every factory in which, in connection with any process carried on, there is given off any dust or fume or other impurity of such a character and to such extent as to be likely to be injurious or offensive to the persons employed, or any substantial quantity of dust of any kind, all practicable measures shall be taken to protect the persons employed against inhalation of the dust or fume or other impurity and to prevent

> its accumulation in any workroom, and in particular, where the nature of the process makes it practicable, exhaust appliances shall be provided and maintained, as near as possible to the point of origin of the dust or fume or other impurity, so as to prevent it entering the air of any workroom."

18. A number of elements is required to establish liability under the subsection. Firstly, there must be a process which generates dust or fume or other impurity. Secondly, the dust or fume etc must be of a character or extent as to be likely to be injurious or offensive. Thirdly, the dust, fume or other impurity must be injurious or offensive to those employed. But by way of alternative to the requirement that it be injurious or offensive, if the dust given off is substantial this will be sufficient to ground liability. Finally, the measures to be taken in order to protect against inhalation of the dust, fume or other impurity must be practicable.

19. Mr McDonald had relied on the second limb of the subsection, *ie* that the amount of asbestos dust that was given off in the areas of the power station where he had been exposed to it was substantial. The first issue between the parties on this aspect of the case was whether it was sufficient that the volume of the dust at the time that it was initially generated was substantial, irrespective of its concentration at the time that Mr McDonald inhaled it or whether it had to be shown that at the time he was exposed to and inhaled it, there was a substantial quantity of dust. The appellant argued that the concentration of dust had to be substantial at the moment of exposure and inhalation. The respondent submitted that, if the quantity of dust that was initially liberated was substantial, it was not required under section 47(1) to show that, at the time Mr McDonald was exposed to it, the amount of the dust was substantial; it was enough that, at the point of its being given off, it could be so described.

20. The appellant also argued that no duty was owed to Mr McDonald because he was not a person employed for the purposes of the subsection. On this issue the respondent claimed that, during the time that he was exposed to the dust, Mr McDonald was a "person employed". It was submitted that to interpret section 47(1) so as to limit its application to workers actually engaged in the process of producing the dust or fume would greatly restrict the scope of the provision and would exclude from protection many who would be affected by the process. Moreover, it would have been a simple matter to confine the application specifically to those actually engaged in the production of the dust or fume by an express provision to that effect. An example of such an explicit provision was to be found in section 49 of the 1937 Act dealing with protection for eyes.

The application of the 1931 Regulations

21. The principal argument of the appellant was that the 1931 Regulations, in their original conception and subsequent application, were focused on the asbestos industry and those working in it. The purport of the appellant's submission on this point was that section 79 of the 1901 Act envisaged the designation of a dangerous industry rather than proscription of the use in industry generally of dangerous material. Only when a trade or industry was formally nominated as dangerous was it to be subject to the Regulations. That submission, it was claimed, derived support from the terms of section 82 which focused on factories and workshops where the dangerous industry was carried on. It was also sustained, Mr Nolan argued, by the title of the Regulations, "The Asbestos *Industry* Regulations" and the definition of asbestos. That definition referred to asbestos in its unprocessed *ie* its raw, mineral condition. It did not comprehend processed asbestos products such as asbestos insulation.

22. It was claimed that the exclusive focus of the Regulations on the asbestos industry was also indicated by subparagraph (v) of the preamble relating to sawing, grinding, turning, abrading and polishing in the dry state, of articles composed wholly or partly of asbestos in the manufacture of such articles. The express inclusion of the qualification that these processes were confined to the *manufacture* of asbestos products made clear, it was said, that the subject of the 1931 Regulations was the asbestos industry and the production of materials within that industry, rather than the use of asbestos products in the work of other industries.

23. For the respondent it was argued that the terms of section 79 and the certification by the Secretary of State indicated that the Regulations were to apply whenever and wherever a defined process was carried on in a factory or workshop. This was in keeping with the mischief which Merewether and Price had identified and the remedy they had proposed. There was no reason to adopt a narrow definition of "asbestos industry" and on that basis restrict the application of the Regulations. The term "asbestos industry" in the title was used in the wide sense of any industry where one or more processes referred to in the preamble was carried on.

24. The breadth of the terms of the preamble was considered by the Court of Appeal in *Cherry Tree Machine Co Ltd v Dawson sub nom Jeromson v Shell Tankers (UK) Ltd* [2001] EWCA Civ 101, [2001] ICR 1223. Hale LJ, delivering the only substantive judgment with which Mantell LJ and Cresswell J agreed, pointed out in para 7 that the preamble had made it clear that the Regulations applied to all factories and workshops in which the listed

processes took place. She also adverted to the import of the proviso in the preamble. She held (at para 12) that the trial judge was plainly right to conclude that, for the exemption in the proviso to apply, it was required both that the work was carried on only occasionally and that no person was employed at that work for eight hours or more in any week. That conclusion made it distinctly difficult for the application of the Regulations to be confined to factories and workshops where asbestos was manufactured. Sporadic or occasional work involving the manufacture of asbestos was inherently unlikely to be a feature of factories where that activity was the sole or primary undertaking. On this account Hale LJ declined to follow the decision in the Scottish case of *Watt v Fairfield Shipbuilding & Engineering Co Ltd* 1999 SLT 1084. In that case, Lord Gill had felt that it was possible to give the proviso a satisfactory meaning, notwithstanding his conclusion that the 1931 Regulations applied only to the asbestos industry. Hale LJ was not persuaded that this was possible, saying at para 21:

> "It is however very difficult to imagine a factory or workshop whose main business was producing asbestos or asbestos products to which the exemption could possibly apply, given that only certain processes, infrequently carried on, are exempted and only then if none of the other defined processes is carried on in the same factory."

25. The argument that the Regulations only applied to the asbestos industry and to the manufacture of asbestos had also been accepted in the earlier case of *Banks v Woodhall Duckham Ltd*, an unreported decision of the Court of Appeal which had been delivered on 30 November 1995. The Court of Appeal in *Cherry Tree* distinguished that case, Hale LJ commenting (at para 25) that the observations of the court in *Banks* were not essential to the determination of the case because the trial judge had been unable to make findings of fact as to the extent to which any of the defendants had exposed the claimant to asbestos and what if any damage flowed from any such exposure.

26. The appellant challenged the correctness of the decision in *Cherry Tree*. It was submitted that too great an emphasis had been placed on the preamble's description of the processes and insufficient regard had been had to the underlying theme of the 1901 Act and the 1931 Regulations. This was that an industry was to be regulated rather than processes involving the use of asbestos. In particular, the preventive measures suggested in the Merewether and Price Report were directed specifically towards the suppression and control of the dust involved in *manufacturing processes*, and steps to be taken in relation to *those employed in the industry* (p 17 of the Report).

27. The central thesis of the appellant's case rests on the notion that there was, at the time the 1931 Regulations were made, a clearly identifiable asbestos industry; that this industry was engaged solely in the manufacture of asbestos; and that it was the intention of the Secretary of State, in making the Regulations to confine their application to that closely defined industry. Several reasons can be given for rejecting that argument, the first and most prosaic being that, if that had indeed been the Secretary of State's aim, it could have been easily achieved by an unequivocal statement to the effect that the Regulations only applied to the asbestos manufacturing industry. So far from stating that, the Regulations made it prominently clear that *all* factories and workshops in which certain specified processes are carried out are covered by the Regulations. The emphasis immediately falls on the processes rather than the nature of the industry. And this is entirely logical. If processes other than those involved in the manufacture of asbestos were known to give rise to the risk of developing fibrosis (as they were at the time the Regulations were made) why should they be excluded from their ambit?

28. Secondly, the Merewether and Price Report, on which the appellant places such weight, did not focus exclusively, in my view, on the asbestos manufacturing industry. The first (and more important) part of the Report is devoted to an investigation of whether workers exposed to asbestos were at risk of developing pulmonary fibrosis. That investigation had been commissioned by the Home Office following the discovery, in February1928, of a case of non-tubercular fibrosis of the lungs in an asbestos worker, of sufficient severity to necessitate treatment in hospital (Seiler's case). As the covering letter enclosing the Report to the Home Secretary makes clear, the investigation established that the inhalation of asbestos dust over a period of years results in the development of a serious type of fibrosis of the lungs. It was not suggested (nor could it have been) that inhalation of asbestos dust sufficient to cause fibrosis could only occur in the course of asbestos manufacture.

29. The first part of the Report was not focused on the asbestos industry as such, therefore, but on the propensity of exposure to asbestos to cause fibrosis. As it happens, workers in the textile branch of the asbestos industry were chosen for study because their exposure was to pure, or nearly pure, asbestos. Workers in other parts of industry had exposure to a mixture of dusts, of which asbestos was one. It was considered necessary to choose those whose exposure was to asbestos alone in order to evaluate the effect of asbestos dust. At p 7 of the Report, however, the authors highlighted the considerable number of workers exposed to the influence of mixed dusts of which asbestos was but one. As Judge LJ said, speaking of the Merewether and Price Report in *Maguire v Harland & Wolff plc* [2005] EWCA Civ 1, "the research was

confined to asbestos textile workers, but [the Report] explained that workers in other industries, exposed to asbestos dust, were also at risk" (para 23).

30. The choice of workers in the asbestos textile industry for investigation does not betoken a view on the part of the authors of the Report that protection for that category of workers was alone required. They were chosen because they were known to be exposed to asbestos dust and, since the purpose of the investigation was to examine whether there was a connection between asbestos dust and fibrosis, it was logical to focus on them. But the critical finding was that exposure to asbestos dust gave rise to the serious risk of grave illness. Confronted by that finding and by the statement that workers in other areas of industry were exposed to asbestos, there is no obvious reason that the Secretary of State should decide to confine the application of the Regulations to the manufacturing arm of the asbestos industry and to leave unprotected the "considerable number" of other workers exposed to a mixture of dusts including asbestos.

31. While the second part of the Report dealt with the suppression of dust in the asbestos industry, it did not suggest that precautionary measures need only be taken in relation to the manufacture of asbestos. It would be illogical if it had done so in light of the central finding of the first part – that prolonged exposure to asbestos, in whatever circumstances that occurred, carried a grave risk of serious illness. Moreover, the second section of the Report looked separately at textile and non-textile processes involving use of asbestos materials. The latter included electrodes with an asbestos covering and miscellaneous goods containing a proportion of asbestos. These processes were recognised by the authors of the Report to create significant exposure to asbestos and thereby a risk to health. At p 19 the authors stated:

> "Apart from manufacture, certain work is carried on in premises subject to the Factory and Workshops Acts, as well as in other premises, which involves use or manipulation of asbestos or products containing it. The insulating of boilers, pipes, engines and parts of ships is the most important. Much of this work is done on board ship by contractors who employ a considerable outdoor staff."

32. It is therefore unwise to dwell too heavily on some of the wording of the Regulations themselves in order to try to construct an exclusive emphasis on the manufacture of asbestos. It is quite clear that the risks of ill health through exposure to asbestos other than in the course of its manufacture had been recognised. Moreover, it is unsurprising that the Regulations should refer to many aspects of manufacture because the Merewether and Price Report had

dealt with asbestos textile workers. But that circumstance alone does not justify the view that it was intended that the Regulations should apply only to the manufacture of asbestos and that the risks arising from other forms of exposure should be ignored.

33. The Report on Conferences between Employers and Inspectors concerning Methods for Suppressing Dust in Asbestos Textile Factories obviously was concerned with that area of the industry. While the Secretary of State had regard to that report, there is no reason to suppose that, simply because it dealt only with that side of the industry, the risks arising from exposure in other circumstances would be overlooked.

34. A third reason for rejecting the appellant's claim that the Regulations were designed to apply to the manufacturing processes of "the asbestos industry" is that it is at least questionable whether a self–contained asbestos industry concerned exclusively with manufacturing could be said to exist in isolation from the use of asbestos in other factory settings. As Merewether and Price themselves observed (at p 18 of their Report), the asbestos industry had developed greatly in the years before the report was issued and it continued to expand rapidly mainly because of the "demands of the motor, electrical, engineering and building industries and of the increasing attention now paid to the insulation of steam plant to promote fuel economy."

35. Unlike many other manufactured products, asbestos frequently required to be worked, manipulated, mixed and transformed after the supply of the raw material to the customer. Merewether and Price referred to this at p 19 in the passage quoted at para 31 above. It appears to me highly doubtful that the Secretary of State would have concluded that insulation companies which were not engaged in the manufacture of asbestos but whose workers were daily exposed to asbestos while manipulating it for application in various premises should not be regarded as part of the asbestos industry. And, indeed, in his certification letter, the Secretary of State expressly stated that he had formally certified as dangerous the *manipulation* of asbestos as well as the manufacture or repair of articles composed wholly or partly of asbestos and processes incidental thereto.

36. In this context, it is appropriate to consider the Parliamentary material relied on by Mr Nolan as indicating the government's intention that the 1931 Regulations should apply only to the asbestos manufacturing industry. The first of these was a reply given on behalf of the Ministry of Labour on 13 March 1930 to a question concerning the number of men and women employed in the asbestos industry and insured for unemployment. The reply given was as follows:

> "Separate statistics of the number of insured persons in the asbestos industry are not available, as that industry is included with others in the group 'Textile industries not separately specified.' At the population Census of 1921, the number of 'occupied' persons classified as belonging to the asbestos industry in Great Britain included 2,550 males and 1,327 females, aged 12 and over." (Hansard (HC Debs) Col 1520 W)

37. On 15 November 1934, in answer to a question about the number of deaths from asbestosis, the Home Secretary said:

> "About 60 deaths have been brought to the notice of the Department and after investigation are all attributed by the Senior Medical Inspector of Factories to exposure incurred previous to the Asbestos Industry Regulations of 1931 which required elaborate precautions. …. Special inquiry in 1932 as to other risks in warehouses and certain other processes revealed no need for any extension of the regulations, but their effectiveness will continue to be closely watched." (Hansard (HC Debs) Col 2122)

38. Finally, Mr Nolan drew our attention to a statement made on 5 December 1966 by the Minister for Labour to the effect that he was revising the Asbestos Industry Regulations 1931, and intended "to extend their application to all industries and processes in which asbestos is used". (Hansard (HC Debs) Col 197 W).

39. In the well-known passage of his speech in *Pepper v Hart* [1993] AC 593, 634 Lord Browne-Wilkinson set out the circumstances in which Parliamentary material could be used as an aid to construction of legislation in the following terms:

> "…. reference to Parliamentary material should be permitted as an aid to the construction of legislation which is ambiguous or obscure or the literal meaning of which leads to an absurdity. Even in such cases references in court to Parliamentary material should only be permitted where such material clearly discloses the mischief aimed at or the legislative intention lying behind the ambiguous or obscure words. In the case of statements made in Parliament, as at present advised I cannot foresee that any statement other than the statement of the

> Minister or other promoter of the Bill is likely to meet these criteria."

40. Leaving aside the question of whether the Regulations are ambiguous, it is quite clear that none of the statements to which the appellant referred partakes of the quality required. Quite apart from the fact that none bore directly on the issue of the application of the Regulations to an asbestos manufacturing industry only, none could be said to disclose the mischief aimed at or the legislative intention underlying them. And, of course, two of the statements post-dated the making of the Regulations and are, therefore, at most, an expression of view as to how they should be construed rather than a true guide to legislative intent. The respondent is undoubtedly correct, therefore, in the claim that the conditions for the admissibility of the Parliamentary material are not present in this instance and is also correct in the assertion that, in any event, the statements do not assist in giving any real insight into the legislative intention in making the Regulations.

41. For essentially the same reasons the 1967 report (referred to in para 16 above) cannot be regarded as an authoritative guide to the proper construction of the Regulations. This represents, at best, one possible view as to the extent of their application. The statement that the Regulations do not apply to lagging and insulation operations using asbestos is not elaborated upon nor is any reasoned support for it provided. It also contrasts with the memorandum dated 6 September 1949 from the chief safety officer of the appellant's predecessors to regional safety officers, in relation to the lagging of steam pipes in generating stations. In it the view of the Deputy Chief Inspector of Factories is recorded as being that the 1931 Regulations applied to the mixing of asbestos in power stations but did not apply to the removal of old lagging or the application of insulation.

42. The next reason for rejecting the appellant's principal argument is that given by Hale LJ in the *Cherry Tree* case, namely, that the first proviso in the preamble is not only otiose but impossible to explain if the application of the Regulations is confined to the manufacture of asbestos. An industry devoted exclusively to making this product simply could not avail of the proviso. It could have no relevance if the appellant's contended-for interpretation of the Regulations is correct. The fact that it was included points unmistakably to the conclusion that it was envisaged that the Regulations would apply to processes other than the manufacture of asbestos. Allowing an exemption for work with asbestos which was occasional and carried on for no more than 8 hours per week simply does not make sense if the Regulations were only to apply to the asbestos industry as the appellant has defined it. This proviso flatly contradicts the appellant's claims as to the scope of application of the Regulations.

43. It is, of course, true that, if the Regulations are held to apply to all factories at which any of the processes is carried on, regulation 2(b) may appear somewhat anomalous. To require mixing or blending by hand of asbestos to be carried on in a special room or place in which no other work is ordinarily carried on might appear to cast a considerable burden on employers engaged in lagging operations. The respondent confronts this seeming incongruity head on by saying that since 'mixing' work, in its wide sense, gave rise to dust to which workers were exposed other than those carrying out the work, it was a sensible and practical measure to stipulate that mixing should be undertaken in a separate room or place and, pursuant to regulation 2(a), provided with a suitable exhaust draught.

44. I am not convinced that this provides a complete answer to the claim that regulation 2(b), if applied to lagging operations and those working in their vicinity, imposes a duty that would in practical terms be very difficult to fulfil. Be that as it may, I am of the firm view that regulation 2(b), if applied to all processes listed in the preamble, is more readily explicable than would be the exemption in the proviso if the regulation is confined to asbestos manufacture only. While, therefore, I acknowledge that the terms of regulation 2(b) lend some support to the notion that the Regulations were designed to be more restrictive in their application, I do not consider that this is of sufficient moment to displace the plain meaning to be given to the preamble in applying the Regulations to all of the processes listed or to counteract the more obvious anomaly of the existence of an exemption for the asbestos manufacturing industry which plainly had no relevance to it.

Mixing

45. Active dispute arose as to whether the term "mixing" in the Regulations should be given a specialised, technical, or its ordinary, meaning. In support of its argument that it should be given a restricted, technical meaning, the appellant conducted a close textual analysis of the Merewether and Price Report, citing instances of where the term had been used in conjunction with other processes of manufacture. Reliance was also placed on the Report on Conferences where it was clear, the appellant claimed, that the expression "mixing" was used in the technical sense of mixing raw asbestos as a preparatory step to its use in the manufacture of asbestos products.

46. In the Merewether and Price Report at p 11, "mixing" is first in a list of processes which includes crushing, opening and disintegrating. And at p 21 the process of "mixing" is identified in the same context as the breaking, crushing, disintegrating, opening and grinding of asbestos and before reference to the sieving of asbestos. This, the appellant claims, is a reference

to the preparatory steps for use of asbestos mineral in product manufacture, rather than mixing asbestos to create a paste. This claim is fortified, the appellant says, by the reference on p 31 of the Report to the dusty process of hand mixing incidental to opening (ie manufacturing) processes.

47. The appellant argues that the recommendations contained in the Merewether and Price Report correlate directly to the classification of processes in the preamble to the 1931 Regulations. Thus the first recommendation (relating to exhaust ventilation at dust producing points) was the foundation for regulation 1. The reference in this recommendation to the fact that such measures have not been applied to "hand work" and that "special difficulties remain to be overcome in some cases eg .... mixing ...." clearly referred back to "mixing" identified on pp 21 and 31 of the Report. The recommendation that, unless the problem was surmounted, there should be "general ventilation of a high standard applied so as to draw the dust-laden air away from the worker" became regulation 2(a), the appellant claimed, and therefore applied specifically to "mixing or blending by hand" with this clear technical meaning.

48. These arguments are founded on the premise that the Merewether and Price Report and the Report on Conferences were translated directly to the provisions in the Regulations. This is a false premise for two reasons. First, the letter of 15 September 1931 indicated that, while the Regulations would "follow generally" the recommendations made in the two reports, certain additions and modifications had also been made. Secondly and more importantly, the Merewether and Price Report and the Report on Conferences were based on the investigation of the specific conditions which had been addressed by both reports. As earlier explained, Merewether and Price had isolated a particular group of asbestos workers for the precise reason that they wished to evaluate the effect of exposure to asbestos dust alone rather than the effect of exposure to mixed dusts including asbestos. The Report on Conferences was concerned with methods for suppressing dust in asbestos textile factories. But the consideration of the Secretary of State could not be constrained by the restricted basis on which the reports were prepared. He should not have – and must be presumed not to have – ignored the risk to those who worked with asbestos, other than in the manufacturing process, that the Merewether and Price Report had clearly identified.

49. Although Merewether and Price had, for understandable reasons, chosen workers whose activities were confined to the manufacture of asbestos, the significance of their findings went well beyond the impact on that restricted category of employees. In particular, it was well known, at the time that the Regulations were made, that mixing of asbestos to create a paste was a regular feature of lagging. And Merewether and Price's findings, properly

understood, pointed clearly to the risk that chronic exposure to asbestos would entail, whatever the circumstances in which it occurred. If it had been intended to exclude from the ambit of the Regulations mixing for the purpose of creating a paste for lagging, this would have been, in light of contemporaneous knowledge, a surprising outcome. In any event, it would have had to be made explicitly clear and it was not. I am satisfied, therefore, that the term "mixing" in the Regulations should not be given the restricted, technical meaning for which the appellant contends and that it should be taken to cover mixing asbestos powder with water such as occurred in this case.

The appellant's secondary argument

50. The appellant argued alternatively that, even if the Regulations covered mixing of asbestos to prepare a paste for lagging, they did not apply to someone such as Mr McDonald because he was not employed in the dangerous trade which had been certified by the Secretary of State under section 79 of the 1901 Act. The appellant submitted that the Regulations could not have application wider than the statutory power under which they had been made and that a side note to section 79 stated that the power was to "make regulations for the safety of persons employed in dangerous trades".

51. Mr Nolan acknowledged, however, that the House of Lords had held in *Canadian Pacific Steamships Ltd v Bryers* [1958] AC 485 that the section 79 power was a wide one and entitled the Secretary of State to make regulations which could create a statutory duty to protect persons not employed in the process regulated (in that case a regular crew member of a ship undergoing repair in dry dock). The nature and extent of any duty under regulations made pursuant to the section 79 power therefore depended on the terms of the particular regulations.

52. Although there was no express provision in the Regulations which restricted their application to persons employed in the process of mixing asbestos for lagging, the appellant argued that it was implicit that the duty was so limited, firstly because that was in accord with the structure of the Regulations, which was to prescribe precautions to be taken in relation to each of the processes stipulated and, secondly because the mixing process was one of those referred to in the first proviso of the preamble. Alternatively, if the protection extended beyond those who were actually involved in the processes, it did not cover someone who, like Mr McDonald, was not actually employed in the areas where the processes were taking place but was merely a "casual visitor" to those areas.

53. I do not accept either of these arguments. The fact that precautions are prescribed in relation to each of the processes involved says nothing to the question of whether someone has to be involved in the actual process or may be incidentally exposed to the dust or fume which the process generates. It would be remarkable if the group to be protected was confined to those who were carrying out the process but those who were at risk from exposure because of their proximity to it should remain unprotected. Given that the *Canadian Pacific* case had established that section 79 empowered the Secretary of State to make regulations which afforded protection to workers not involved in the process, the essential question is whether the 1931 Regulations, as made, had availed of that opportunity. Where the risk of injury arises from inhalation of dust or fumes (and, of their nature, processes which generate these do not discriminate as to who inhales them), there does not appear to me to be any logical reason to exclude those employees who are liable to be affected by exposure solely because they do not actively work on the processes.

54. Merewether and Price had adverted directly to this issue at p 20 *et seq* of their Report, stating that within the same workroom there could be several different processes carried on, each producing dust containing asbestos. The Report recognised that a worker might be exposed to harmful dust created by a process he was not engaged in:

> "In many works several processes are carried on in the same room. In the absence of effective means of preventing escape of dust into the air, many workers are subjected to a risk from which they would otherwise be immune, or to a greater risk than that arising from their own work."

55. As Mr Allan QC for the respondent pointed out in his submissions on section 47 of the 1937 Act, many processes within a factory are fully automated. It could not have been Parliament's intention, he argued, that, where a fully automated process was producing dust or fume, no workers exposed to that dust or fume were protected by the section. For reasons that I will give in the next section of the judgment, I accept that submission. Using the same basis of reasoning I consider that the Secretary of State should be taken to have been principally concerned with protecting workers who were liable to be exposed to asbestos, rather than with confining protection to those whose job it was to carry out the processes which generated the risk of exposure.

56. The fact that the mixing process was referred to in the first proviso of the preamble does not sound directly on whether the Regulations should extend to employed persons who are not actively involved in that process. The

exemption available is perfectly understandable and workable if the Regulations apply to workers involved in that process and others who, by reason of their proximity to it, are liable to inhale the dust or fume that it generates.

57. I shall deal with the appellant's argument in relation to the claim that Mr McDonald was not a person employed but merely a casual visitor or sightseer in the part of the judgment dealing with section 47 of the 1937 Act, to which I now turn.

The possible application of section 47

58. The respondent has accepted that, in order to establish that there has been a breach of statutory duty based on the second limb of section 47(1), it must be shown that: (1) the dust was given off in connection with a process carried on in the power station; (2) Mr McDonald was "a person employed" within the meaning of the section; (3) the quantity of dust when given off was substantial; and (4) Mr McDonald inhaled dust given off by the relevant process. The appellant agrees with this formulation except in relation to the third condition. Mr Nolan contends that it must be shown that not only was the quantity of dust substantial at the point that it was generated by the process, it must be substantial at the point of inhalation. I shall consider each of these in turn.

Was the dust given off in connection with a process?

59. The appellant submitted that lagging operations were not part of the process carried on at Battersea power station. That process was, the appellant claimed, the generation of electricity. Mr Nolan relied on the judgment of Stuart-Smith LJ in *Banks* where he accepted an argument that the lagging of pipes that may have given rise to dust was not a process being carried on in the factory, which was the manufacture of steel.

60. In *Nurse v Morganite Crucible Ltd* [1989] AC 692 the House of Lords considered the meaning of "process" in section 76(1) of the Factories Act 1961 and the Asbestos Regulations 1969. Lord Griffiths stated at 704:

> "The Divisional Court in giving leave to appeal to your Lordships' House certified the following point of law of general public importance:

> "Whether for the purposes of the Factories Act 1961 and Regulations thereunder 'process' carried on in a factory means a manufacturing process or other continuous and regular activity carried on as a normal part of the operation of the factory."

> My Lords, I am not prepared to answer the question in this form because the word 'process' is scattered throughout many sections of the 1961 Act, and it appears in many regulations made thereunder. Your Lordships have not had the opportunity to consider the meaning to be attached to 'process' wherever it appears and it is possible that it has different meanings in different contexts. I would confine my opinion to the meaning of the word 'process' where it is used in the 1969 Regulations and I would answer the certified question by saying that where the word 'process' is used in the Regulations it means any operation or series of operations being an activity of more than a minimal duration."

61. Although Lord Griffiths specifically confined his opinion as to the meaning of process to its use in the 1969 Regulations, it is clear that he rejected (at least implicitly) any notion that, to be a process in a factory, an activity had to be integral to the principal output of the enterprise. In the *Nurse* case the business of the factory was the manufacture of crucibles. Asbestos was not used for any purpose directly associated with that product. If an argument akin to that presented by the appellant in the present case had been accepted in *Nurse* that would have disposed of the appeal. It did not. And it did not because it was not necessary that, in order to be an activity in connection with a process, it had to be shown that it was directly involved with the manufacture of the end product of the factory.

62. In *Brophy v J C Bradfield & Co Ltd* [1955] 1 WLR 1148 the plaintiff's husband had been overcome by fumes from a boiler used to heat the factory. It was claimed that the lack of ventilation in the boiler room constituted a breach of sections 4 and 47 of the Factories Act 1937. The Court of Appeal held that this was not a process within the meaning of those sections. At p 1153, Singleton LJ dealt with the point pithily when he said:

> "… upon the facts it does not appear to me that the boiler room was a workroom within the meaning of section 4 (1) of the Act or that the fumes were 'generated in the course of any process or work carried on in the factory.' This was a boiler used for

heating the factory and I do not think that that section applies to the facts of the present case."

63. In *Owen v IMI Yorkshire Copper Tube*, an unreported decision of Buxton J delivered on 15 June 1995, the judge felt that the decision in *Brophy* could be explained on the basis that when the fumes came from the factory heating supply and not from any part of the manufacturing process it was not a part of the process carried on in the factory. For my part, I would not distinguish *Brophy* on that basis. I consider that it was, on this point, wrongly decided. A process in a factory should not be confused with the product that is manufactured. In factories all manner of processes are carried on which contribute to the ultimate manufactured product in varying degrees of closeness. Thus, for instance, the heating system in *Brophy* was not required, in the sense of making a direct contribution to the manufacture of tents and canvas goods (which was the business of the factory). But a heating system was doubtless required in order that the manufacture of those goods could take place.

64. The words in section 47(1), "a process" carried on in any factory should be given their plain and natural meaning. To suggest that they import some intimate connection with the manufacture of a product introduces an unnecessary and unwarranted gloss on the subsection. If it is a process that is a normal feature of the factory's activity, it is a process for the purposes of the legislation. I would therefore hold that the lagging work which Mr McDonald encountered in the power station constituted a process for the purposes of section 47 and that the first condition necessary to show breach of subsection (1) of that section has been met.

Was Mr McDonald a person employed?

65. On the question of whether Mr McDonald was a person employed, the Court of Appeal decided that he was not, either in the sense of being employed at the factory or in the process of handling asbestos – McCombe LJ at para 59 and the Lord Dyson MR at para 107.

66. As Mr Allan pointed out, an interpretation of the section which restricts its application to workers engaged in the process producing the dust or fume would greatly curb the scope of the provision and would exclude from protection many workers affected by exposure to the substances. And, as he also submitted, where the purpose of a provision is to protect the health of workers, a restrictive interpretation should not be adopted unless the wording compels it – *Harrison v National Coal Board* [1951] AC 639 per Lord Porter

at 650. The wording of the section does not compel a restrictive application. For the reasons given in paras 27 and 53-55 above, I consider that, in approaching the interpretation of this subsection, the emphasis should be on the need for protection rather than on involvement in the process. One could perhaps understand a more restricted approach where the danger was inherent to the process or where there was a special risk to those actively involved in the process but that is not the case here.

67. Section 49 of the 1937 Act provides an example of such a special risk. That section empowered the Secretary of State to make regulations in relation to a process which involved a special risk of injury to the eyes from particles or fragments thrown off in the course of the process, and to require that suitable goggles or effective screens should be provided to protect the eyes of the persons *employed in the process*. The rider that the regulations should be targeted at those employed in the process in that instance is logical, given that the risk can be expected to arise only for those who are actually involved in the process but the same cannot be said for dust or fumes which are liable to be inhaled by any who encounter them. The absence from section 47 of a similar rider to that found in section 49 is significant. It reflects the recognition that the risk of exposure extends beyond those who are involved in the process of generating the dust or fume which can cause injury.

68. In *Morrison v CEGB*, an unreported decision of 16 March 1986, Rose J held that section 63(1) of the Factories Act 1961 (the equivalent of section 47(1) of the 1937 Act) only extended protection to those engaged in the process. He held that if it had been intended to extend the protection to those working in the factory generally, then the section could have been so worded. It does not appear that Rose J was referred to section 65 of the 1961 Act (the equivalent of section 49 of the 1937 Act). In the later case of *Owen v IMI Yorkshire Copper Tube* Buxton J considered both sections and reached the opposite conclusion to that of Rose J. He gave five reasons for arriving at that conclusion, four of which I agree with and find compelling. They are these: (i) the phrase "in connection with any process carried on" refers to *the dust and fume* produced, *not to the person* operating that process; (ii) the effect of section 63 was to prohibit accumulation of dust or fume in *any workroom at all*, and not merely in the workroom where the process producing them was carried out; (iii) comparison with section 4 of the 1961 Act showed that section 63 provided the same ambit of protection as section 4 which, in material part, provided that adequate ventilation of each workroom, and the rendering harmless, so far as practicable, of all fumes, dust etc generated in the course of *any process or work* carried on in the factory as may be injurious to health; (iv) since the duty imposed by section 63 was to prevent *accumulation of dust or fume*, the protection which it was designed to achieve

must extend to all employed in the workroom, not just those engaged in the process.

69. In the Court of Appeal, the decision of Buxton J in *Owen* is referred to only *en passant* at para 49 and in a footnote to para 56 of McCombe LJ's judgment. The learned Lord Justice and the Master of the Rolls preferred to follow the decision in *Banks* on this question. Stuart-Smith LJ in *Banks* had adopted the line of reasoning of Rose J in *Morrison.* Although he was aware that Buxton J had disagreed with *Morrison* in his judgment in *Owen*, Stuart-Smith LJ indicated that he had not seen the judgment in the latter case. He concluded that the words "persons employed" in section 47 of the 1937 Act related back to the earlier words, "in connection with any process". This he found to be "the natural reading of the words". I do not agree. There is no reason to import, in effect, the earlier words as a qualification to the plain and simple expression, "the persons employed". As Buxton J pointed out, this would have the effect of creating a significant gap in the cover of protection for workers who might, in the course of their employment, inhale dangerous substances and be at risk of grave illness in consequence. Quite why the creation of such a significant gap should represent the intention of the legislature was not addressed or explained by Stuart-Smith LJ nor, with respect, by the Court of Appeal in the present case.

70. Nor did Stuart-Smith LJ explain, although he adverted to it, why the contrast between sections 47 and 49 of the 1937 Act did not point clearly to the former section being interpreted more widely. For the reasons given in para 67 above, I consider that this divergence is significant and clearly betokened an intention that the application of section 47 should extend to those employed persons liable to be affected by the dust or fume, not merely to those employees who were responsible for producing those substances.

71. But if the section applied to persons employed generally, did it apply to Mr McDonald who was not employed by the occupiers of the power station and who did not require to go to the areas where he was exposed to asbestos in order to fulfil the requirements of his own employment? In *Massey-Harris-Ferguson (Manufacturing) Ltd v Piper* [1956] 2 QB 396 the Divisional Court held that "persons employed" where that expression was used in section 60 of the 1937 Act included not only servants of the occupier, but any other person who might be called on to do work in the factory, including a painter employed by an independent contractor. At p 401, Lord Goddard CJ said, "The test is whether a person is employed in the factory, not whether he is employed by the occupier." This approach was approved by the House of Lords in the *Canadian Pacific* case – see Viscount Kilmuir at 504. On this basis, it was unnecessary for Mr McDonald to show that he was employed by

the occupiers of the factory. The fact that he was employed by a different organisation is irrelevant to the application of the subsection to his case.

Casual visitor

72. What of the circumstance that Mr McDonald was not required to go to that part of the factory where he inhaled the dust which led to the development of mesothelioma? The answer is supplied, I believe, by the decision of the Court of Appeal in *Uddin v Associated Portland Cement Manufacturers Ltd* [1965] 2 QB 582. In that case it was held that section 14 of the 1937 Act applied where a workman in the factory went to a part of the premises where he had no authority to go and his arm was caught in a revolving shaft. At 593E Lord Pearce said, "there is … nothing to justify the gloss that an employed person is to be protected only so long as he is acting within the scope of his employment." The suggestion that Mr McDonald was acting within the scope of his employment while in the areas where pulverised fuel ash was collected and stepped outside that scope as soon as he crossed the threshold of another room in the factory is fanciful. I consider that the second condition to establish breach of section 47(1) has also been met.

Substantial quantity – at time of giving off or inhalation?

73. The third condition of the subsection that arises in the present case is that a substantial quantity of dust be present, on the appellant's case at the time of inhalation, and, on the respondent's, at the time that it was given off. Resolution of the conflict between these two positions must begin with a close examination of how the requirement is framed in the subsection itself. The duty to take all practicable measures is triggered when there is *given off* any injurious or offensive dust or fume or any substantial quantity of dust of any kind. The subsection does not stipulate that the quantity of dust must be substantial at the point of inhalation. The text of the provision therefore favours the respondent's claim as to its proper interpretation.

74. It is to be presumed that the greater the quantity of dust given off, the greater the chance that it will be inhaled before it is dissipated. It is therefore not at all surprising that practicable measures should be required to be taken at the point at which the dusts or fumes are given off. On that account also, the respondent's position is to be preferred. That interpretation as to the effect of the subsection also appears to have been accepted by Widgery J in *Nash v Parkinson Cowan Ltd* (1961) 105 S J 323 although the judge in that case does not appear to have been asked to consider the two possible interpretations advanced on the present appeal.

75. Mr Nolan argued that his interpretation was supported by certain statements made by Singleton LJ in *Gregson v Hick Hargreaves & Co Ltd* [1955] 1 WLR 1252 where at 1263 he said, "No one could successfully contend … that if there was given off a considerable quantity of dust at one end of this 100 yards long shop, everyone down to the other end of the shop should be provided with a mask". It appears to me, however, these remarks were made in the context of an examination whether it was practicable to supply masks rather than on the question of whether the obligation to take practicable measures arose if the amount of dust was considerable at the time that it was given off. In a later passage Singleton LJ said:

> "On the latter part of section 47(1) on which [counsel for the plaintiff] relies, he is entitled to say there was given off a substantial quantity of dust, and thus the employers were under a duty to take all practicable measures to protect the plaintiff and others employed against inhalation of the dust."

76. I consider therefore that the duty to take practicable measures arises whenever a considerable quantity of dust is given off and that the activation of the duty is not dependent on its being shown that the quantity of dust was considerable at the moment of inhalation. In my view, therefore, the third condition would be satisfied in Mr McDonald's case if the evidence established that, at the time the asbestos dust was given off, it was of substantial quantity.

The evidence about the amount of dust at the time that it was given off

77. The Court of Appeal in the present case held that the trial judge had failed to make a finding on whether the amount of dust given off was substantial. At para 62 McCombe LJ said that the judge made no finding on this point because although he had begun to address the question at the beginning of para13 of his judgment, by the end of the paragraph "he had strayed off into the question of whether … Mr McDonald had been exposed to dust 'likely to be injurious or offensive'". At para 109 Lord Dyson MR said, "It is unfortunate that the judge did not make any finding on this issue of fact and it is difficult for this court to make good this omission."

78. McCombe LJ analysed the evidence in relation to the giving off of a quantity of dust in paras 63 and 64 and the Lord Dyson MR expressed agreement with that analysis. For reasons that will appear, it is necessary to set out both paras:

"63. Mr Allan's submission in this area is that the evidence showed that there were substantial quantities of asbestos dust discharged in the activities at the power station and that it matters not that such dust may not have been substantial at the point of inhalation. He submitted that it was common ground between the experts that the processes at the power station would have produced a substantial quantity of dust. He referred to the reports of Mr Raper for Mr McDonald and Mr Glenn for the first respondent … The first of those references includes a table of Mr Raper's compilation referring to the concentrations of asbestos dust to which Mr McDonald was likely to have been exposed. Each is based upon Mr McDonald's 'proximity' to the location of various operations. The table is introduced by the following:

> '4.31 On the basis of the claimant's account and in view of the foregoing [in which Mr Raper had stated his own understanding of 'substantial quantities of dust'], I would estimate the concentrations of asbestos dust to which the claimant is likely to have been exposed as shown in the following table...'

The second passage, from the report of Mr Glenn, was in these terms:

> 'If there was work with asbestos insulation in the power station then there was the potential for anyone close to that work to be exposed to a high concentration of asbestos dust, but the dust would disperse as it moved away from the work area and those in neighbouring areas would have been subjected to a lower concentration of dust than those directly involved in the work.'

64. In my judgment, these passages are slender evidence of the giving off of a substantial quantity of dust. The first is based upon Mr McDonald's account which, as the judge found, had its deficiencies. The second only alludes to a 'potential' for exposure to high quantities of dust based upon proximity of the person in question to the operation in question. I consider that that material is not adequate to demonstrate that there was the giving off of any 'substantial quantity of dust' *relevant to the injury said to have been caused to Mr McDonald at these premises*. There simply was not the necessary evidence to

> establish in this case what quantities of dust were discharged by work at this power station and in what circumstances so as to constitute a 'substantial quantity' for the purposes of the section." (Emphasis added).

79. Mr Allan criticises these passages on a number of grounds. He submits that there was in fact clear and undisputed evidence that: (1) the insulation at this power station would have contained asbestos; (2) insulation work was undertaken at the power station which included mixing asbestos powder in oil drums, sawing pre-formed sections and removing old lagging by ripping it off pipework; and (3) the activities of mixing asbestos powder, sawing asbestos sections and removing old lagging would generate high concentrations of asbestos dust which, on any view, would amount to "substantial quantities of dust".

80. He pointed out that the consultant engineers, Mr Raper and Mr Glenn, in their joint statement agreed that asbestos would have been present in the lagging materials within the power station at the material time. Mr McDonald in his witness statements had described asbestos powder being mixed in oil drums, the cutting of pre-formed sections and the removal of old lagging. Mr Raper had stated that these activities would have given rise to high concentrations of asbestos dust. This opinion did not rest solely on Mr Raper's assessment of Mr McDonald's evidence. He referred to published work by PG Harries who had measured dust levels in naval dockyards and supported his opinion by references to the relevant literature.

81. When Mr Raper gave oral evidence these sections of his report were not challenged, Mr Allan claimed. What was put in issue was the extent of Mr McDonald's exposure. It was not surprising, said Mr Allan, that Mr Raper's oral evidence about high concentrations of dust was not challenged since what he had said on the subject was entirely uncontroversial. Moreover, Mr Glenn, in his report, acknowledged that some types of work with asbestos insulation can release large amounts of asbestos dust unless appropriate precautions are taken and he gave a similar opinion in his report to that of Mr Raper regarding the fact that mixing of asbestos would give rise to high concentrations of asbestos dust.

82. At the trial, according to Mr Allan, neither the appellant nor the first defendant disputed that within the power station work was carried out involving asbestos insulation and this work would cause substantial amounts of dust to be given off. What was in dispute was the extent and frequency of Mr McDonald's exposure. Finally, Mr Allan pointed out that in the *Cherry Tree* case it was not controversial that the type of lagging activities described

by Mr McDonald gave rise to high concentrations of visible dust (Hale LJ para 39).

83. For the appellant, Mr Nolan argued that the requirement that there be a substantial quantity of dust introduced either a qualitative or a quantitative dimension and suggested that in *Anderson v RWE NPower plc* (unreported 22 March 2010) Irwin J had inclined to the view that the substantial element of the requirement involved a qualitative component. At para 43 of his judgment in that case Irwin J had said, "the phrase 'substantial dust' itself may add little, since in context it almost certainly meant 'so substantial as to be likely to be injurious'". On this approach some foreseeable risk of injury was imported into the test and its application would have to take account of prevailing knowledge (or lack of knowledge) of the risk. If this was the correct approach, Mr Nolan submitted that the test could not have been satisfied since an unequivocal finding had been made by the trial judge that the level of Mr McDonald's exposure was not greater than that thought of at the material time as being unlikely to pose any real risk to health – see para 4 above.

84. If the substantial element connoted merely a quantitative element, Mr Nolan claimed that this must mean more than a significant quantity. He referred to the case of *Richards v Highway Ironfounders (West Bromwich) Ltd* [1955] 1 WLR 1049 when the plaintiff was found to have had to work in clouds of silica dust. (It is to be noted, however, that there was no examination by Sir Raymond Evershed MR of the extent of dust that had to be present for the requirement of substantial to be met, presumably because it was beyond dispute that the quantity was indeed substantial. It should also be noted that, in contrast with the approach of Irwin J in *Anderson*, the Master of the Rolls considered that the question of foreseeability of injury was relevant only to the issue of practicable measures).

85. Mr Nolan submitted that any evidence of the quantity of dust which depended on Mr McDonald's account of the working conditions which he encountered was of limited value since his evidence about his exposure had been rejected by Judge Denyer QC as unreal and this finding had not been disturbed by the Court of Appeal. It is important to note precisely what the judge said about this. At para 11 he said:

> "I reject the notion that he was constantly standing in clouds of asbestos dust when he was there —this is an unreal scenario. I accept the defendant's analysis that as you move away from the centre of activity, levels of harmful dust decline. I accept that his likely exposure when exposed was not greater than those

> levels thought of in the 50s and 60s as being unlikely to pose any real risk to health".

Two points need to be made about this passage. First the rejection of Mr McDonald's account related to his claim that he was standing in clouds of *asbestos* dust when, of course, Mr McDonald's case on section 47 was being advanced on the basis of the *giving off* of substantial quantity of dust of *any* kind. As the Court of Appeal held, the judge failed to address that question. The second and related point is that the judge appears to have made his judgment on the question of the levels of dust on the basis of whether they gave rise to known risks. He did not address what has been described, for instance by Sir Raymond Evershed MR in *Richards,* as the dichotomy in section 47.

What does substantial mean?

86. The relevant phrase in section 47 is *any* substantial dust of *any* kind. I should start my discussion on this part by saying what this does *not* mean. It does not mean a substantial quantity of injurious dust. The so-called dichotomy in section 47 points clearly away from such an approach. Whether the second limb of the subsection is triggered calls for a purely quantitative assessment. It may well be, as suggested in cases such as *Richards* and *Gregson*, that the possibly injurious propensity of the dust has a part to play in deciding what are practicable measures. But that has nothing to say on the question whether, in the first instance, there is any substantial quantity of dust of any kind.

87. The question whether the dust is asbestos or other injurious dust should therefore not obtrude into the initial assessment of whether the second limb of section 47(1) is engaged. To do this conflates consideration of the second limb with considerations that are relevant to the first limb. Proper application of the subsection requires a staged approach: (i) is the dust, fume or other impurity which is given off of such a character and given off to such an extent as to be likely to be injurious or offensive to the persons employed? (ii) if not, has any substantial quantity of dust of any kind been given off in the workroom where the claimant was a person employed? (iii) if the answer to (i) or (ii) is "yes" are there practicable measures which can be taken to protect the persons employed against inhalation of the dust or fume or other impurity and to prevent its accumulation in any workroom? And (iv) if the answer to (iii) is "yes" have they been taken?

88. This staged approach was not followed by the trial judge nor, I am afraid, by the Court of Appeal, although, in fairness, it does not seem to have been

presented to either in quite the stark way that I have expressed it. Indeed, by the time that the matter came before the Court of Appeal, it may not have been feasible for counsel to present it in quite that way, given the flow of the evidence before Judge Denyer QC. Be that as it may, it is clear that the sharp distinction that should have been drawn between matters required to establish liability under the first limb and those required to sustain a case under the second was not maintained. The opening words of para 63 of McCombe LJ's judgment and his observation that there was no evidence that any substantial quantity of dust relevant to Mr McDonald's injury had been given off disclose that that clear division between the two limbs was not preserved. Of course, the question of whether any substantial quantity of any dust caused or contributed to Mr McDonald's condition would always be relevant but not at the stage where what was being decided was if there was a substantial quantity of dust of any kind.

89. Mr Allan submits that the failure of the trial judge and the Court of Appeal to approach the application of the second limb properly is not fatal to the respondent's case on the cross appeal. In particular, he points to the fact that, at the time of Mr McDonald's exposure, no reliable scientific means existed for measuring the concentrations of dust in the atmosphere. In these circumstances, he suggests, the assessment of dust levels had to be by reference to a visible dust cloud, even though the hazardous proportion of the dust would be invisible to the naked eye. There was enough evidence, he claimed, to allow this court to conclude that such a visible dust cloud was present and that, therefore, the proposition that there was a substantial quantity of dust was made out.

90. The problem with this submission is that there was no examination before the trial judge or the Court of Appeal of the issue whether the only means of assessing whether dust levels amounted to substantial was by visible assessment. Or, at least, if there was, it does not feature in the judgment of either court. Nor was evidence given of how dense the cloud would have to appear to be. These, and doubtless many other issues, would have been canvassed before Judge Denyer QC if there had been a clear confrontation of the question whether, merely on its appearance, the quantity of dust which was generated at the time Mr McDonald was in the workroom satisfied the statutory requirement of being substantial. It is not possible for this court to conduct retrospectively the type of investigation that would be required to provide a confident outcome to that debate. I have concluded, therefore, that the third condition has not been, and cannot now be, satisfied.

The fourth condition – has it been shown that Mr McDonald inhaled asbestos dust which caused his mesothelioma?

91. The undisputed evidence was that anyone who was present in the workroom where lagging operations were carried out would be exposed to asbestos dust. It was not disputed that Mr McDonald was so present. While the extent of his exposure was a matter of controversy, the fact that he was exposed to some extent was not. Therefore, as Lord Dyson MR pointed out in para 119 of his judgment, in the absence of any suggestion that he was exposed to asbestos in any other employment or in the general atmosphere, "causation will have been established in the conventional way". I consider that causation has been established and that Mr McDonald's estate is entitled to recover appropriate compensation.

Disposal

92. I would dismiss the appeal and the cross-appeal.

LADY HALE:

93. A just and sensible judge is always prepared to admit that she has been wrong. But it would not have been comfortable to be the "swing vote" between two Justices who thought that *Cherry Tree Machine Company Ltd v Dawson* (sub nom *Jeromson v Shell Tankers (UK) Ltd*) [2001] EWCA Civ 101, [2001] ICR 1223 was rightly decided and two who thought that it was wrong. I am therefore mightily relieved that the unanimous view is that it was rightly decided. The claimant's husband in *Cherry Tree* was employed as an apprentice fitter in a factory which manufactured dry cleaners' presses. For two years, it was part of his job to mix asbestos flock with water in a bucket and then apply it to the plattens of a press in order to seal them to stop the steam escaping. He was therefore mixing the asbestos as part of the process of manufacturing a product containing asbestos. That sort of mixing, as Lord Reed explains, was covered by the Asbestos Industry Regulations 1931. He was also engaged in the manufacture of such products and thus undoubtedly within the class of persons whom the Regulations were designed to protect.

94. The first question in this case is whether the mixing of asbestos with water in order to form a paste with which to lag pipes and boilers in a power station was also covered by the Regulations. The second question is whether the Regulations were designed to protect a person such as Mr McDonald, who was not employed by the power station but was there in the course of his

employment with another employer. Neither question is without difficulty, as the difference of opinion in this court demonstrates. But it is common ground that if Mr McDonald's exposure to asbestos was in breach of a statutory duty owed to him, the power station will be liable on the basis of having materially increased the risk of his suffering injury from that exposure.

95. The Regulations in question were made under section 79 of the Factory and Workshop Act 1901 (see para 6 above). This gave the Secretary of State power to do two things: first, to certify that any "manufacture, machinery, plant, process or description of manual labour, used in factories or workshops" was dangerous, if he was satisfied that it was "dangerous or injurious to health or dangerous to life or limb, either generally or in the case of women, children or any other class of persons"; and second, having so certified, to "make such regulations as appeared to him reasonably practicable and to meet the necessity of the case". Section 82 made it clear that the regulations could cover any factory or workshop where the certified manufacture or process took place.

96. The Secretary of State certified as dangerous "the manipulation of asbestos and the manufacture or repair of articles composed wholly or partly of asbestos and processes incidental thereto". The focus was upon the processes of manipulation and manufacture and not on any particular setting where this might happen. This focus is carried through into the Preamble to the Regulations, which directs that they shall apply to "all factories and workshops or parts thereof in which the following processes or any of them are carried on". The only indication in the Regulations that they might not apply to all such factories or workshops is in the title – The Asbestos Industry Regulations – coupled with what that might have been understood to mean at the time.

97. But that understanding is not crystal clear from the Merewether and Price Report on whose findings and recommendations the Regulations were based. We can all read that Report, and the Report on Conferences between Employers and Inspectors concerning Methods for Suppressing Dust in Asbestos Textile Factories which followed it, and find some words which appear to support the view which we have taken of the Regulations and some which point the other way. Part I of the Merewether and Price Report is devoted to establishing that there is a dose-related risk to health from exposure to asbestos dust. Part II is devoted to an explanation of the processes in which asbestos dust might be generated and the methods of suppressing that dust. The introduction to Part II lists seven main groups of asbestos products, including at (c) insulation materials. But it also points out that "apart from manufacture, certain work is carried on in premises subject to the

Factory and Workshops Acts, as well as in other premises, which involves use or manipulation of asbestos or products containing it" (p 19). It cannot therefore be assumed that the authors were only concerned with the factories and workshops in which the particular seven products listed as (a) to (g) were produced. The concluding summary and recommendations include the comment that "Dust is produced at many kinds of machines, in hand process work, and in simple incidental operations, particularly in emptying settling chambers, and in all handling of 'fiberized' asbestos" (p 31). The overall message is clear: asbestos dust is potentially harmful; it is produced when handling asbestos and in various other manufacturing processes; and steps should be taken to suppress it.

98. In my view, the title to the Regulations, and the preceding Report, are by no means clear and unequivocal enough to dispel the plain meaning of the words of the Preamble to the Regulations, which direct that they shall apply to *all* factories and workshops in which the listed processes are carried out. This is reinforced by the exclusion of places where only some of those processes are carried on and then only occasionally. The Regulations do only apply to factories and workshops, and not, therefore, to places such as ships where processes producing asbestos dust were also known to be carried on. But the power station with which we are concerned was a factory or workshop to which the Factories Acts applied.

99. The next question, therefore, is whether mixing asbestos-containing insulation material in large drums to create insulating paste was a process covered by the Regulations. Mr Nolan QC, for the defendant, mounted a vigorous argument that "mixing" in paragraph (i) of the list of processes in the Preamble had a narrow technical meaning which could not include mixing such as this. He pointed to the uses of the term "mixing", in both the Merewether and Price Report and the Report on Conferences, in the context of the work of preparing raw asbestos for use. He also pointed to the context, at the beginning of the list of processes in the Regulations, before the references to the processes involved in the manufacture of various products.

100. Mr Nolan's meaning would not have included the mixing of asbestos flock with water in order to make the paste used to seal the plattens in *Cherry Tree*, a process which is also described in the Merewether and Price Report. His meaning is difficult to reconcile with the Regulations' definition of "asbestos" as "any fibrous silicate mineral, and any admixture containing any such mineral, whether crude, crushed or opened". As Lord Reed points out (para 155(v)), mixing of asbestos can take place at three stages within the asbestos industry: mixing the contents of sacks before crushing; mixing the crushed material before it is opened; and mixing the opened or fiberized asbestos with other materials in order to produce asbestos products. But once

the meaning is taken beyond the narrow technical meaning for which Mr Nolan argued, it is difficult to see why mixing "asbestos" (as defined in the Regulations) with water to make a paste to seal the plattens in a dry cleaning press is covered but mixing the same asbestos with water to make lagging paste is not, provided that both processes are carried on in a place covered by the Factories Acts. The question comes back, therefore, to whether the Regulations are confined to the industry of making asbestos products, on which I respectfully differ from Lord Reed for the reasons given earlier.

101. The next question, therefore, is whether Mr McDonald was a person for whose protection the Regulations were made. The 1901 Act itself made no mention of civil liability towards anyone. Under section 85(1), breach of the Regulations was a criminal offence punishable only with a fine. But it was long ago established that, if statutory duties were created for the protection of a particular class of persons, who might be injured if those duties were not observed, then Parliament might not have intended that criminal liability were the only remedy: see, for example, the classic statement in *Groves v Lord Wimborne* [1898] 2 QB 402. Civil liability therefore depends upon whether the claimant belongs to such a class. But logic suggests that there must be some limit: the class may be very wide but it is less likely that legislation creating a criminal offence also intended to impose what is often a strict civil liability, independent of negligence or the foreseeability of harm, towards anyone at all who might suffer injury as a result of a breach.

102. Sometimes the statute itself suggests the limit, as with the provisions of sections 47 and 49 of the Factories Act 1937, which protect respectively "persons employed" and "persons employed in the process" (see paras 17 and 67 above). Sections 79 and 82 of the 1901 Act do not contain even those limits. There is the complication, as pointed out in *Canadian Pacific Steamships Ltd v Bryers* [1958] AC 485, that the 1901 Act was repealed by the 1937 Act and Regulations made under it were deemed to have been made under the corresponding provisions of the 1937 Act; section 60 of the 1937 Act was originally limited to the protection of persons employed in the regulated processes; but this was amended in 1948 to cover all "persons employed". However, as Viscount Kilmuir pointed out, while Regulations which were ultra vires when made could not be rendered intra vires if the scope of the later Act were wider, it did not follow that Regulations which were intra vires when made could become ultra vires if the scope of the later Act were narrower.

103. Is there anything, therefore, to suggest that the duties imposed in the 1931 Regulations are owed only to persons employed by the factory or workshop in question, as opposed to persons employed elsewhere who come to the factory in the course of their employment and may be exposed to asbestos

dust as a result? Part II of the Regulations imposes certain duties (breach of which is also punishable by a fine) upon "persons employed", but some refer simply to "persons employed", others to "persons employed at [specified] work", and one provides that "no person" shall misuse or wrongfully interfere with appliances provided in pursuance of the Regulations. This certainly suggests a link with employment, but not with any particular employment.

104. Although liability under the Factories Acts is often considered a type of employers' liability, it is in fact a species of occupiers' liability, the duties being placed upon the occupiers of the factories and workshops to which they applied. The object of those duties was to protect people from the harm which they might suffer as a result of the processes being carried on there. As was pointed out by both Lord Goddard LC and Streatfeild J in *Massey-Harris-Ferguson (Manufacturing) Ltd v Piper* [1956] 2 QB 396, it is often the people who are not regularly employed in the factory in question who are most in need of the protection offered by duties of this sort. The test which they adopted was whether a person was employed in the factory, not whether he was employed by the occupier. This test was approved by the House of Lords in the *Canadian Pacific Steamships* case.

105. The court in both those cases clearly regarded the decision in *Hartley v Mayoh & Co* [1954] 1 QB 383 as something of an exception to the general principle. There it was held that there was no liability under the Electricity Supply Regulations towards a fireman attending a factory fire who was electrocuted because of faulty wiring. It is noteworthy that, first, the occupier was only held responsible for 10% of the damages, the remainder being the responsibility of the electricity company; second, that the occupier was held liable in common law negligence anyway; and third, that no authorities, other than the general principle in *Groves v Lord Wimborne*, are cited for the proposition in any of the judgments in the Court of Appeal.

106. Mr Allan QC, for the respondent claimant, suggested that the test of a "person employed" is a person who attends the factory in the course of his employment, with the possible proviso that he does so in connection with the processes carried on there, rather than solely in connection with his employer's business. Mr McDonald met that test. He was there on a regular, although not frequent, basis in order to collect the pulverised fuel ash generated by the power station's processes. I accept, of course, that at the time the Regulations were made, it was not known that a fatal disease might be caused by exposure to a single fibre of asbestos. The Merewether and Price Report was concerned with what was then seen as a dose-related risk of developing asbestosis. But the Report also acknowledged that "the appropriate methods for suppression of dust may only be fully determined when the harmful effects of comparatively low concentrations of asbestos

dust are duly appreciated" (p 31). The message was clear: asbestos dust is harmful and the then known methods must be employed to protect workers from it. I see no difficulty in regarding Mr McDonald as a person employed in the power station, albeit not by the power station, who was entitled to such protection as the Regulations then required.

107. It follows that I agree with Lord Kerr and Lord Clarke that the appeal should be dismissed.

108. In those circumstances, it is not strictly necessary to express a view on the cross-appeal, but in my view it should be allowed. As I am in a minority of one on this issue, I will explain my reasons very briefly. All the conditions required by the "substantial quantity" limb of section 47 of the Factories Act 1937 (see para 109) are made out. I agree, for the reasons given by Lord Kerr, that the lagging operations were a process carried on at the power station. I also agree with him that *Brophy v JC Bradfield & Co Ltd* [1955] 1 WLR 1148 was wrong to hold that a factory's heating system was not a process carried on in the factory for this purpose. I agree with both Lord Kerr and Lord Reed that the persons protected are not limited to those employed on the process in question. For the reasons given earlier, I agree with Lord Kerr that the claimant was a "person employed" and thus protected by section 47. And I agree with both Lord Kerr and Lord Reed that the quantity of dust must be substantial at the time when it is given off and not necessarily at the time when it is inhaled. I remind myself that causation is not in issue in this case.

109. Where I respectfully disagree is in their conclusion that there was no evidence that the quantity of dust given off at the relevant time was substantial. I agree with Lord Kerr that this limb of section 47 requires only a quantitative assessment of the amount of dust of any kind being given off at the relevant time. The relevant time is not when Mr McDonald was exposed to the dust or in the room where the lagging work was being done. It is when the dust was given off. This issue was not addressed by the trial judge, who was side-tracked into issues of foreseeability and whether the dust was likely to be injurious, which are relevant to negligence and to the first limb of section 47, but not to the second. Nor, with respect, was it addressed by the Court of Appeal in the passages quoted by Lord Kerr (at para 78). They were concentrating on the evidence of Mr McDonald's exposure and not on the evidence of the quantity of dust given off when it was given off. The evidence of both experts as to the amount of dust likely to have been given off by the various lagging activities carried on at the power station (summarised by Lord Kerr at paras 79 to 81) was entirely uncontroversial. In my view it shows that the amount of dust given off was substantial. The question then is whether practicable measures could have been taken to protect persons employed from inhaling the dust. But that issue has not been raised by the

appellant defendant, who has throughout argued that the section does not apply, rather than that there was nothing the appellant defendant could reasonably have done about it. The burden was upon the appellant defendant to make such a case and the appellant defendant has not.

110. Hence I would have allowed the claimant/respondent's cross-appeal in addition to dismissing the defendant/appellant's appeal.

LORD CLARKE:

111. Lord Kerr and Lord Reed have reached different conclusions on the question whether the appellant was in breach of regulation 2(a) of the Asbestos Industry Regulations 1931 ("the Regulations"). Lord Kerr concludes that it was, whereas Lord Reed concludes that it was not. I prefer the reasoning and conclusion of Lord Kerr on this question, which is the critical question in this appeal.

112. Lord Kerr concludes that the Regulations should be given a broad construction. He refers in paras 6 to 14 to the statutory basis for and to the provenance of the Regulations. He refers to sections 79 and 82 of the Factory and Workshop Act 1901 and to a letter from the relevant Secretary of State dated 15 September 1931 enclosing a draft of the Regulations. He notes the breadth of the anticipated application of the Regulations and the express provision in section 82(1) that processes which did not exist at the time could come within the Regulations in the future. Thus section 83 provided that regulations made under the Act might, among other things, (b) prohibit, limit or control the use of any material or process. At para 10 Lord Kerr quotes from the preamble to the Regulations, of which para (i) is of particular relevance here. It provided that the Regulations were to apply to

> "all factories and workshops or parts thereof in which the following processes or any of them are carried on:
>
> (i) breaking, crushing, disintegrating, opening and grinding of asbestos, and the mixing or sieving of asbestos, and all processes involving manipulation of asbestos incidental thereto; …"

The remaining sub-paragraphs are set out by Lord Kerr in para 10 above.

113. Then in paras 11 and 12 Lord Kerr refers to one of the provisos to those provisions:

> "Provided that nothing in these Regulations shall apply to any factory or workshop or part thereof in which the process of mixing of asbestos or repair of insulating mattresses or any process specified in (v) or any cleaning of machinery or other plant used in connection with any such process, is carried on, so long as (a) such process or work is carried on occasionally only and no person is employed therein, for more than eight hours in any week, and (b) no other process specified in the foregoing paragraphs is carried on."

I agree with Lord Kerr that, although the proviso cut down the scope of the Regulations, it also gave some insight into their intended ambit. In particular, it carried the clear implication that the processes identified in the preamble, other than those listed in the proviso, were to come within the Regulations even if the work involved in them took place only occasionally or for limited periods. Also, as Lord Kerr observes, in relation to the processes listed in the proviso, including mixing, the Regulations were to apply unless the work was carried out occasionally and no person undertook it for more than eight hours a week.

114. The preamble provided that it was the duty of the occupier of relevant premises to observe Part I of the Regulations, which included regulation 2. Regulation 2(a) and (b) provided:

> "2. (a) Mixing or blending by hand of asbestos shall not be carried on except with an exhaust draught effected by mechanical means so designed and maintained as to ensure as far as practicable the suppression of dust during the processes.
>
> (b) In premises which are constructed or reconstructed after the date of these Regulations the mixing or blending by hand of asbestos shall not be done except in a special room or place in which no other work is ordinarily carried on."

115. The essential issue between the parties is whether the regulation 2(a) covered only the asbestos industry and was concerned with asbestos in its raw unprocessed condition, as submitted on behalf of the appellant, or whether it extended to processed asbestos products, as contended on behalf of the

respondent. In powerful judgments, Lord Reed espouses the former view, whereas Lord Kerr espouses the latter.

116. Both Lord Kerr and Lord Reed refer extensively to the Merewether and Price Report and other relevant pointers. I entirely accept that a critical part of the Regulations was concerned with processes in the manufacture and repair of items containing asbestos. This is plain from paras (i) to (vi) of the preamble quoted by Lord Kerr at para 10 and, indeed, can be seen from the title to the Regulations, namely the Asbestos Industry Regulations. However, the question is whether that expression should be given a wider or narrower meaning. It seems to me that the better view is that it should be given a wider meaning.

117. The purpose of the Regulations was surely to protect workers from the consequences of asbestos dust. I do not myself see why that protection should be limited to those affected by asbestos dust in the process of manufacture and repair and not those affected whenever a defined process was carried on in a factory or workshop.

118. All depends upon whether the process carried on in the present case was within para (i) of the preamble to the Regulations quoted above. In short, was it within the expression "mixing or sieving of asbestos, and all processes involving manipulation of asbestos incidental thereto"? Asbestos was defined as meaning "any fibrous silicate mineral, and any admixture containing any such mineral, whether crude, crushed or opened." As I read his judgment, Lord Kerr accepted these submissions made on behalf of the respondent (summarised at his para 23). (1) Consistently with the mischief identified by Merewether and Price and the remedy they proposed, the terms of section 79 and the certification of the Secretary of State indicated that the Regulations were to apply whenever and wherever a defined process was carried on in a factory or workshop. (2) There was no need to adopt a narrow definition of "asbestos industry" and on that basis restrict the application of the Regulations. The title was used in the wide sense of any industry where one or more of the processes referred to in the preamble was carried on.

119. I agree. As I see it, the specific question which must be answered is that identified by Lord Reed in paras 151 and 152. As he says in para 151, the expert evidence given at the trial indicated that insulation material containing "opened" or "fiberized" asbestos were widely used until the 1960s for lagging boilers and pipework. Such material commonly contained fiberized asbestos, mixed with other substances such as calcium silicate or cement. The insulation material could either be pre-formed or mixed with water and applied in the form of a paste. Pre-formed sections were sawed by hand in

order to profile them for fitting. The mixing of the paste involved bags of powdered insulation material being emptied into open-topped containers for mixing with water. Lord Reed concludes in para 152 that, having regard to that evidence, it appears likely, on the balance of probabilities, that the insulating material used by the laggers was an admixture containing fiberized asbestos and was therefore "asbestos" as defined in the Regulations. The question posed by Lord Reed is whether the activities of the laggers fell within the Regulations.

120. I agree with Lord Reed that that is indeed the question. It appears to me, at any rate on the face of it and if the language is given its ordinary and natural meaning, that the conclusion that the material was an admixture amounts to a conclusion that there had been a mixing of asbestos within the meaning of para (i) of the preamble. Equally, as I see it, there was a "process of mixing of asbestos" within the meaning of the proviso quoted above, although the proviso would not apply on the facts because the conditions were not both satisfied. For my part, I do not think that the principle noscitur a sociis leads to the conclusion that the word mixing should be given other than its ordinary and natural meaning.

121. I turn briefly to the authorities. I agree with Lord Reed that in *Watt v Fairfield Shipbuilding & Engineering Co Ltd* 1999 SLT 1084 Lord Gill confined the scope of the Regulations too narrowly. I also agree with him that the first case in which a detailed consideration of the background to the Regulations was *Cherry Tree Machine Co Ltd v Dawson (*sub nom, *Jeromson v Shell Tankers (UK) Ltd)* [2001] EWCA Civ 101; [2001] ICR 1223, which has been discussed in some detail by both Lord Kerr and Lord Reed and in which Hale LJ gave the only reasoned judgment, with which Mantell LJ and Cresswell J agreed. Both Lord Kerr and Lord Reed accept that it was correctly decided, although Lord Reed expresses disagreement with some of the dicta in Hale LJ's judgment.

122. As I read that judgment, Hale LJ approached the construction of the Regulations in the way that I have sought to do. I refer to only two aspects of her judgment in addition to those referred to by Lord Kerr. First, she said at para 24 on p 1232 that none of the arguments in *Banks v Woodhall Duckham Ltd* (which was an unreported decision of the Court of Appeal dated 30 November 1995) or *Watt* was "sufficiently persuasive to combat the natural and ordinary meaning of the words used". Hale LJ approached the issue of construction by reference to the natural and ordinary meaning of the words used and was not persuaded that the title to the Regulations, namely the Asbestos Industry Regulations, led to any different conclusion. At para 20 she described the most powerful of the submissions to the contrary as being the title to the Regulations but said that there were two even more powerful

points in reply. The first was that the Regulations were expressed to apply to *any* factory or workshop where the defined processes took place and the second was a point on the proviso much as referred to above. Secondly, at para 25, Hale LJ expressed some doubt as to whether the Regulations applied to the work of knocking off old lagging but that they were more likely to have applied to the laggers' work in mixing asbestos to form new insulation. I respectfully share those views of Hale LJ (for the reasons she gives) and the views of Lord Kerr on 'mixing' at paras 45 to 49 and prefer them to the different views of Lord Reed.

123. I would only add that I also share the views of Lord Kerr expressed at paras 27 to 35 of his judgment. In particular, if the Secretary of State had intended to limit the Regulations to a narrow view of the asbestos industry, he could easily have done so, whereas, as Hale LJ observed, the Regulations made it clear that all factories and workshops in which certain specified processes were carried out were covered. If the purpose of the Regulations was to protect workers from asbestosis dust, why exclude these workers? I adopt Lord Kerr's approach to the Merewether and Price Report at his paras 28 to 35 without repeating it here. I would only underline the statement of Judge LJ quoted by Lord Kerr at his para 29, that "the research was confined to asbestos textile workers, but [the report] explained that workers in other industries, exposed to asbestos dust, were also at risk." The critical finding was that exposure to asbestos dust gave rise to grave illness.

124. For these reasons, like Lord Kerr, I would hold that the Regulations applied to the work being done by the laggers. I agree with Lord Kerr and Lord Reed that it is not necessary for a person in the position of Mr McDonald to show that he was employed by the occupier or in the process in connection with which the dust or fume is given off. The question remains, however, whether he was employed at the factory. As Lord Kerr explains at paras 72 and 73, it is not necessary that the employee should be acting in the course of his employment: *Uddin v Associated Portland Cement Manufacturers Ltd* [1965] QB 582, per Lord Pearce at 593E.

125. Lord Kerr notes at para 71 that, at any rate for the purposes of section 60 of the 1937 Act, "persons employed" included any person who might be called on to do work at the factory, including a painter employed by an independent contractor: see for example *Massey-Harris-Ferguson (Manufacturing) Ltd v Piper* [1956] 2 QB 396. On the other hand, after referring to those cases, Lord Reed observes at para 217 that the expression does not extend to a fireman who enters a factory in order to put a fire out (*Hartley v Mayoh & Co* [1954] 1 QB 383), or to a police constable who enters a factory in pursuit of a felon (*Wigley v British Vinegars Ltd* [1964] AC 307, 324 per Viscount Kilmuir), although he is a person and he is employed. Lord Reed adds that

in *Canadian Pacific Steamships Ltd v Bryers* [1958] AC 485, 504 Viscount Kilmuir considered that the phrase applied to "any person who is employed in the factory whether the direct servant of the occupier or a servant of an independent contractor so long as he is employed upon work in that factory". He adds that in the later case of *Wigley v British Vinegars Ltd*, concerned with a window cleaner employed by an independent contractor, Viscount Kilmuir said, at p 324:

> "In my view, the true distinction is between those who are to work for the purposes of the factory and those who are not. Clearly, maintenance of the factory is work for the purpose of the factory, while the arrest of a felon or the putting out of a fire is not, though it may benefit the factory indirectly. Window cleaning is part of the maintenance of the factory and in my view the deceased was within the protection afforded."

126. Lord Reed recognises that these principles tend to give rise to the drawing of fine distinctions without any compelling rationale. The present case might be regarded as an example. As he puts it at para 218, it could perhaps be argued that Mr McDonald was employed for the purposes of the power station, either on the basis that one of those purposes was the sale of the ash, and he was employed collecting ash which had been sold, or on the basis that the ash was a by-product which the power station had to dispose of, and he was employed removing it. However, Lord Reed prefers the contrary view as being more persuasive on this basis. Mr McDonald was not in reality working for the purposes of the power station. He was working solely for the purposes of his employer, the Building Research Establishment. It was the purchaser of the ash which was a by-product of the power station, and it employed Mr McDonald to collect the ash in his lorry. A customer of a factory can hardly be regarded as working for the purposes of the factory.

127. I am bound to say that I prefer the former view. It appears to me that a lorry driver who goes to a factory to collect its produce is in a real sense working for the purposes of the factory, albeit as the employee of someone else. The collection of goods is essential to the operations of the factory. The driver is much closer to the painter or the window cleaner than the fireman or the policeman. I therefore prefer the view of Lord Kerr. I would hold that, in the relevant sense and at the material time, Mr McDonald was employed in the factory.

128. For these reasons I would hold that the appellant was in breach of the duty contained in regulation 2(a) and that, provided that the relevant causal link was established, the respondent's estate is entitled to recover appropriate

compensation. As to causation, the position is summarised by Lord Dyson MR in para 119 of his judgment as follows:

> "As I understand it, the only evidence of Mr McDonald's exposure to asbestos dust is of exposure from the activities at the National Grid's factory. There is no suggestion that he was exposed to asbestos dust in the course of any other employment during his working life. It follows that, unless he was exposed to asbestos dust in the general atmosphere, the mesothelioma must have been caused by the dust to which he was exposed at the National Grid's factory. If he was not exposed to asbestos dust in the general atmosphere, causation will have been established in the conventional way. If he was exposed to asbestos dust in the atmosphere, then he will succeed on the basis that the National Grid materially increased the risk of Mr McDonald contracting mesothelioma: see *Sienkiewicz v Greif (UK) Ltd* [2011] UKSC 10, [2011]2 AC 229."

129. For these reasons I would dismiss the appeal. I do not wish to say anything about the cross-appeal.

LORD REED (with whom Lord Neuberger agrees)

Introduction

130. Mr McDonald was diagnosed with mesothelioma in 2012, and died from the disease in 2014. His only known exposure to asbestos occurred when he was employed by the Building Research Establishment between 1954 and 1959 as a driver and, in the course of that employment, drove a lorry to Battersea Power Station from time to time in order to collect pulverised fuel ash for use in the experimental production of building materials. In order to collect the ash, Mr McDonald had to drive his lorry beneath a chute outside the power station from which the ash was released. He was not exposed to asbestos during that process.

131. The evidence that he was exposed to asbestos during his visits to the power station comes from two written statements made by him, on which he was not well enough to be cross-examined. In his first statement, he said that there was generally a queue of vehicles waiting for deliveries, and that it was his habit to park his lorry and go into the power station for about an hour. He had to deal with paperwork and talk to the manager about his delivery. He got to

know the workers in the power station, and they would show him around. He would also have lunch in the power station. He generally waited in the power station until it was time for him to collect the ash and leave.

132. In his second statement, he said that once inside the power station it took him five minutes to walk to the manager's office. There were usually other people waiting to speak to the manager. Once his paperwork was completed he would speak to the workers who were dealing with his delivery about any delays. He also used the lavatories in the power station.

133. In both statements, he described being present when thermal lagging was applied to boilers and pipework, and seeing the laggers mixing asbestos powder with water in order to make the lagging paste which they then applied to the boilers or pipes being insulated. He also saw laggers cutting pre-formed sections of asbestos to fit to pipes and boilers, and removing old asbestos insulation from pipework. He claimed to have been in close proximity to such work, with visible clouds of asbestos in the air.

134. Aspects of this account were challenged by the appellants, who are the successors of the former occupiers of the power station, and their co-defendant at the trial, the Department for Communities and Local Government, which is the successor of Mr McDonald's employer. It was common ground that the ash plant was separate from the power station, and did not have any lagged pipes or boilers. If Mr McDonald had to enter the power station at all, it would only be to go to the offices. The offices, lavatories and canteen would not be dusty environments. There was no need for Mr McDonald to go inside the boiler house or the turbine house, where there would be lagging of boilers and pipes. If he did so, he went there as a casual visitor. It was very unlikely that Mr McDonald would have been standing in close proximity to clouds of asbestos.

135. The trial judge, HH Judge Denyer QC, accepted the defendants' analysis of the real extent and duration of Mr McDonald's visits to the power station. He concluded that "any exposure was at a modest level on a limited number of occasions over a relatively short period of time", and that "his likely exposure when exposed was not greater than those levels thought of in the 50s and 60s as being unlikely to pose any real risk to health".

136. The question which arises on this appeal is whether the appellants are liable in damages for breaches by their predecessors of regulation 2(a) of the Asbestos Industry Regulations 1931 ("the 1931 Regulations") and section 47(1) of the Factories Act 1937 ("the 1937 Act"). The judge rejected Mr

McDonald's claims under both heads, and also a claim in negligence. The Court of Appeal allowed the appeal in so far as the claim was advanced under the 1931 Regulations. The appellants appeal against that decision. There is a cross-appeal against the dismissal of Mr McDonald's claim under the 1937 Act. The claim in negligence is no longer pursued.

137. I approach the questions raised in the following three parts, before concluding that the appeal should be allowed and the cross-appeal dismissed:

1. The historical background to the making of the 1931 Regulations and the enactment of the 1937 Act.
2. An analysis of the Regulations against the backdrop of certain earlier documents and the relevant authorities, as well as subsequent legislation made on the basis of the understanding of the Regulations which I favour. I conclude this part by considering whether Mr McDonald was within the scope of the Regulations in any event.
3. An analysis of section 47(1) of the 1937 Act and its application to Mr McDonald's case.

138. Although the legislation in question was repealed long ago, the questions raised as to its interpretation are of continuing practical significance. As the facts of this case demonstrate, the consequences of exposure to asbestos may not become apparent for many years. When they emerge, the resultant claims are often of substantial value and of considerable importance to the individuals affected, to the insurance industry and to the Government (which has succeeded to potential liabilities, particularly as a result of the nationalisation of industries in which asbestos was used). The ambit of the legislation is therefore a matter of general public importance.

Part I: the Historical Background

139. It is important to understand at the outset that the connection between asbestos and mesothelioma was unknown when the 1931 Regulations and the 1937 Act were conceived and introduced (and, for that matter, during the period when Mr McDonald visited the power station). The legislation was not designed to protect against the risk of mesothelioma: a risk consequent upon exposure to any quantity of asbestos dust, however infrequent the exposure may be, and however insubstantial the quantity of dust to which the person is exposed. The legislation has to be interpreted in the same way as any other legislation, and not distorted in order to provide compensation to those who were not intended to fall within its protection. It should also be

interpreted without any preconception that it must have been intended to maximise the protection afforded to workers: then as now, legislation concerned with health and safety reflected a compromise between competing interests and objectives.

The Factory and Workshop Act 1901

140. The 1931 Regulations were made under section 79 of the Factory and Workshop Act 1901 ("the 1901 Act"). Part IV of the 1901 Act was headed "Dangerous and Unhealthy Industries". It contained two groups of provisions. The group relevant for present purposes was headed "Regulations for Dangerous Trades". It included section 79, which provided that where the Secretary of State was satisfied "that any manufacture, machinery, plant, process or description of manual labour used in factories or workshops is dangerous or injurious to health or dangerous to life and limb", he might certify "that manufacture, machinery, plant, process or description of manual labour to be dangerous". On such certification, the Secretary of State might make such regulations as appeared to him to be reasonably practicable and to meet the necessity of the case.

The certification

141. In accordance with section 80 of the 1901 Act, notice was given of a proposal to make the 1931 Regulations in a letter issued by the Home Office dated 15 September 1931. The letter narrated that, as required by section 79, the Secretary of State had formally certified as dangerous:

> "the manipulation of asbestos and the manufacture or repair of articles composed wholly or partly of asbestos and processes incidental thereto".

142. It will be necessary at a later point to return to that letter. For the present, it is to be noted that the certification, which was critical to the scope of the power to make regulations, concerned the manipulation of "asbestos" – a term which, as I shall explain, is descriptive of fibrous silicate minerals – and the manufacture or repair of articles composed wholly or partly of those minerals.

Part 2: the 1931 Regulations

143. The 1931 Regulations, which were subsequently revoked and replaced by the Asbestos Regulations 1969 (SI 1969/690, "the 1969 Regulations"), are entitled "The Asbestos Industry Regulations". That title suggests that the Regulations are concerned with something identifiable as the asbestos industry, rather than with the use of the products of that industry in the work of other industries. That is as one might expect from the terms of the certification, which as I have explained concerned the manipulation of asbestos, and the manufacture and repair of articles composed wholly or partly of asbestos, rather than the use of asbestos products.

144. The Regulations begin with a preamble in which the Secretary of State directs that they are to apply to all factories and workshops or parts thereof in which the following processes or any of them are carried on:

> "(i) breaking, crushing, disintegrating, opening and grinding of asbestos, and the mixing or sieving of asbestos, and all processes involving manipulation of asbestos incidental thereto;
>
> (ii) all processes in the manufacture of asbestos textiles, including preparatory and finishing processes;
>
> (iii) the making of insulation slabs or sections, composed wholly or partly of asbestos, and processes incidental thereto;
>
> (iv) the making or repairing of insulating mattresses, composed wholly or partly of asbestos, and processes incidental thereto;
>
> (v) sawing, grinding, turning, abrading and polishing, in the dry state, of articles composed wholly or partly of asbestos in the manufacture of such articles;
>
> (vi) the cleaning of any chambers, fixtures and appliances for the collection of asbestos dust produced in any of the foregoing processes."

145. A proviso to the preamble excludes the application of the 1931 Regulations to:

> "… any factory or workshop or part thereof in which the process of mixing of asbestos or repair of insulating mattresses or any process specified in (v) or any cleaning of machinery or

> other plant used in connection with any such process, is carried on, so long as (a) such process or work is carried on occasionally only and no person is employed therein for more than eight hours in any week, and (b) no other process specified in the foregoing paragraphs is carried on."

As the proviso indicates, occasional exposure to asbestos dust was not thought at that time, unlike the present, to involve a significant risk to health. A further proviso permits the Chief Inspector of Factories to suspend or relax the Regulations, if satisfied that, by reason of the restricted use of asbestos or the methods of working, they could be suspended or relaxed without danger to those employed.

146. A number of terms used in the Regulations are defined. In particular, "asbestos" is defined as meaning:

> "any fibrous silicate mineral, and any admixture containing any such mineral, whether crude, crushed or opened."

147. In relation to the obligations imposed by the 1931 Regulations, it is necessary in particular to note regulations 1(a) and 2.

148. Regulation 1(a) requires an exhaust draught, preventing the escape of asbestos dust into the air, to be provided for

> "manufacturing and conveying machinery, namely:-
>
> > (i) preparing, grinding or dry mixing machines;
> > (ii) carding, card waste-end, ring spinning machines, and looms;
> > (iii) machines or other plant fed with asbestos ;
> > (iv) machines used for the sawing, grinding, turning, abrading or polishing, in the dry state, of articles composed wholly or partly of asbestos."

"Preparing" is defined as meaning:

> "crushing, disintegrating, and any other process in or incidental to the opening of asbestos".

A proviso states that regulation 1 does not apply inter alia "to mixing or blending by hand of asbestos."

149. Regulation 2 provides:

> "(a) Mixing or blending by hand of asbestos shall not be carried on except with an exhaust draught effected by mechanical means so designed and maintained as to ensure as far as practicable the suppression of dust during the processes.
>
> (b) In premises which are constructed or reconstructed after the date of these Regulations the mixing or blending by hand of asbestos shall not be done except in a special room or place in which no other work is ordinarily carried on."

The interpretation and application of the 1931 Regulations

150. Questions are raised in this appeal as to the scope of the 1931 Regulations: in particular, whether they applied to the power station by virtue of the activities carried on there by the laggers, and whether they imposed a duty which was owed to Mr McDonald.

151. In order to decide whether the Regulations applied to the power station, it is necessary in the first place to consider whether "asbestos", as defined, was used by the laggers working there. There is no direct evidence (other than that of Mr McDonald) as to the composition of the material that they used. It appears however from expert evidence given at the trial that insulation materials containing "opened" or "fiberized" asbestos were widely used until the 1960s for lagging boilers and pipework. Such materials commonly contained 15% fiberized asbestos, mixed with other substances such as calcium silicate or cement. The insulation material could be either pre-formed, or mixed with water and applied in the form of a paste. Pre-formed sections were sawed by hand in order to profile them for fitting. The mixing of the paste involved bags of powdered insulation material being emptied into open-topped containers for mixing with water.

152. Having regard to that evidence, it appears likely, on a balance of probabilities, that the insulating material used by the laggers was an admixture containing fiberized asbestos, and was therefore "asbestos" as defined by the Regulations. The question then arises whether the activities of the laggers fell within the ambit of the Regulations.

153. Considering the preamble defining the scope of the Regulations, paragraphs (ii), (iii), (iv) and (v) do not apply: each of them is concerned with the manufacture or repair of products composed wholly or partly of asbestos. Paragraph (vi) is also inapplicable: it is concerned with the cleaning of appliances used for the collection of dust produced in the processes described in paragraphs (i) to (v). The only remaining possibility is paragraph (i), and in particular "the mixing … of asbestos". Do those words include the mixing in a power station of insulation material, containing fiberized asbestos, with water?

154. As noted earlier, paragraph (i) of the preamble concerns "breaking, crushing, disintegrating, opening and grinding of asbestos, and the mixing or sieving of asbestos, and all processes involving manipulation of asbestos incidental thereto". That provision uses a number of ordinary English words, such as "opening" and "mixing", but it is apparent that some of them, at least, are being used in a technical sense embedded in the industrial practice of that period. Opening asbestos, for example, is evidently different from opening a window, or opening an account. Some guidance as to the meaning of paragraph (i) can be obtained from the Regulations themselves, and other assistance from the reports which preceded their introduction.

155. I shall discuss the reports at a later point, but it may be helpful to anticipate that discussion to the extent of summarising what is said in the reports about some of the terms found in the Regulations. In summary:

i) "Opening" asbestos means splitting the raw mineral into fibres.
ii) The first stage in the opening or "fiberizing" of asbestos is for the mineral to be "crushed". This flattens out and breaks up the mineral.
iii) After crushing, the mineral is sieved, for the purpose of grading it, prior to its being opened.
iv) Waste asbestos products are fiberized by being "disintegrated" or "broken up".
v) "Mixing" can take place at three stages within the asbestos industry (an expression which I shall define in the next paragraph). Before crushing, the contents of several sacks of the raw mineral may be mixed on the floor beside the crushing machine. This is described as "rough mixing". After crushing, the crushed material may be mixed prior to being opened. This is referred to as "mixing or blending". After opening, the fiberized asbestos may be mixed with other materials in order to produce a variety of asbestos products, including insulation materials. At all these stages, the mixing may be done by hand or mechanically, although in 1931 mixing or blending in the asbestos textile industry was normally carried out by hand.

vi) "Grinding" can refer to a method of cleaning machinery used for the "carding" of opened asbestos, or to a process used to trim and smooth asbestos products which have been cut or sawn.

156. It appears from this summary that the terms used in paragraph (i) are related, in that they all describe processes employed in the early stages of producing products composed wholly or partly of asbestos. I shall refer to factories and workshops where such products are made as the asbestos industry, reflecting the title of the 1931 Regulations. It is important to bear in mind, first, that that description encompassed in 1931 the production of a very wide range of products of which asbestos formed a component, as I shall later explain in greater detail, and secondly, that factories where such products were made were not necessarily devoted wholly or mainly to their manufacture.

157. The Regulations themselves also suggest a relationship between the processes grouped together in paragraph (i) of the preamble. That is consistent with regulation 1(a)(i), which groups together "preparing" (defined as meaning "crushing, disintegrating, and any other process in or incidental to the opening of asbestos"), "grinding" and "dry mixing". In each of these contexts, the principle of interpretation, *noscitur a sociis*, suggests that "mixing" was a process related to other processes carried on by the asbestos industry, in the wide sense in which I have used that expression, rather than a process carried on in any premises where use was made of insulation materials containing asbestos that required to be mixed with water.

158. In my view, seven other considerations support this interpretation of the term "mixing" as used in paragraph (i) of the preamble and regulations 1 and 2:

i) Extending the *noscitur a sociis* principle beyond paragraph (i), all the other processes contemplated by paragraphs (ii) to (vi) are undoubtedly processes carried on in the course of manufacturing or repairing asbestos products of different kinds. It follows that if paragraph (i) applied to any factory or workshop, of any kind, where insulating materials containing asbestos were mixed with water to form lagging paste, it would have a far wider scope than the other paragraphs. Indeed, given the expert evidence that insulating materials containing asbestos were in common use when the first part of the power station was built, between 1929 and 1935, paragraph (i) of the preamble would on that basis extend the scope of the Regulations to a substantial proportion, if not the majority, of the factories and workshops in the United Kingdom.

ii) If paragraph (i) of the preamble was intended to encompass the mixing of insulation materials containing asbestos with water in any factory or workshop, so that the 1931 Regulations would not be confined to the asbestos industry as I have described it, it would defy logic that paragraph (v) should apply only when the specified processes are carried out in the manufacture of asbestos articles. Since the processes listed in that paragraph would give rise to asbestos dust whether they were carried out in the manufacture of such articles or not, it would be nonsensical to restrict the scope of paragraph (v) unless paragraph (i) were similarly restricted. To give a concrete example, Mr McDonald described being in the proximity of asbestos dust generated by the sawing of pre-formed sections of insulation containing asbestos. That activity does not fall within the scope of the 1931 Regulations, because the articles are not being sawed "in the manufacture of such articles", and paragraph (v) therefore does not apply. That being so, what logic would there be in the mixing of the lagging paste falling within paragraph (i)?

iii) The interpretation of paragraph (i) of the preamble which I have suggested is consistent with the title of the Regulations: "the Asbestos Industry Regulations". That title makes sense if the Regulations apply to factories and workshops producing products composed wholly or partly of asbestos. If on the other hand paragraph (i) were construed as applying to any factory or workshop where asbestos-based lagging materials were used, that title would be inappropriate and misleading.

iv) When regulation 1(a)(i) refers to "mixing machines", it is clear that it is concerned with mixing in the context of manufacturing: regulation 1(a) expressly applies to "manufacturing and conveying machinery". That is also consistent with the other types of machinery described in regulation 1(a), which are all employed in the asbestos industry as I have described it.

v) If regulation 2 is understood as being concerned with "mixing or blending by hand" in the asbestos industry, paragraph (b), which requires the provision of a dedicated room for mixing or blending by hand of asbestos, can be seen to be related to a number of other regulations which make similar provision in relation to particular processes, or particular plant, employed in that industry: for example, the making or repairing of insulating mattresses composed wholly or partly of asbestos (regulation 3(i)), storage chambers or bins for loose asbestos (regulation 4(a)), and chambers or apparatus for dust settling and filtering (regulation 4(b)).

vi) To give regulation 2(b) a wider interpretation would have consequences for industry generally which would be so inconvenient that it is difficult to imagine that they were intended. In particular, if the mixing of insulation materials containing asbestos with water, in order to form the paste widely used to insulate pipework and boilers, constituted "mixing or blending … of asbestos", it follows that any factory or workshop where lagging of that kind was used, constructed after 1931, would have to have a room dedicated to the exclusive use of laggers. It seems unlikely that the Secretary of State can have intended to impose that burden upon industry, and there is no indication that anyone ever supposed that the Regulations had that effect.

vii) Finally, it is important to bear in mind that non-compliance with the Regulations was a criminal offence, by virtue of section 85 of the 1901 Act. *In dubio*, penal legislation should normally be construed narrowly rather than widely.

159. If the mixing of lagging paste is not "mixing" within the meaning of paragraph (i) of the preamble, is it nevertheless one of the "processes involving manipulation of asbestos incidental" to the processes mentioned in that paragraph? Clearly not. Although the mixing of lagging paste might involve the manipulation of asbestos, that manipulation would not be incidental to one of the processes mentioned in paragraph (i).

160. As against the analysis set out above, it has been argued that the first proviso to the preamble to the Regulations implies that their application cannot be restricted to the asbestos industry. It is said to be very difficult to imagine a factory or workshop whose main business was producing products composed wholly or partly of asbestos to which the exemption could possibly apply, given that only certain processes, occasionally carried on, are exempted, and only then if none of the other defined processes is carried on in the same factory. I shall consider this argument at a later point.

The letter dated 15 September 1931

161. Further assistance in the interpretation of the 1931 Regulations can be obtained from two reports which preceded them. The relationship between the Regulations and the reports was explained in the Home Office letter dated 15 September 1931, to which I referred earlier.

162. The letter explained that the proposed regulations followed upon an inquiry conducted by the Factory Department of the Home Office, whose report, "Effects of Asbestos Dust on the Lungs and Dust Suppression in the Asbestos Industry" was published in 1930 (34-206, HMSO). That report has been referred to in these proceedings as the Merewether and Price Report. The letter stated that Part II of the Report had recommended a number of precautionary measures for the prevention of inhalation of asbestos dust "by workmen employed in the industry", the most important of which was the use of exhaust ventilation in both the textile and non-textile sections of the industry.

163. The letter went on to state that it was evident from the Report that further inquiry would be necessary before a decision could be reached as to the best methods to be applied to the various machines in use. A conference was therefore arranged with representatives of the asbestos textile industry and, as a result, a committee consisting of representatives of the manufacturers and of the Factory Inspectorate was set up to consider the best methods for the suppression of dust "in this section of the industry". That committee made a series of recommendations in its report, "Report on Conferences between Employers and Inspectors concerning Methods for Suppressing Dust in Asbestos Textile Factories", published in 1931 (35-214, HMSO). I shall refer to that report as the Conferences Report.

164. The letter explained that the Secretary of State had decided to give effect to the recommendations contained in these two reports, and that the draft regulations generally followed the provisions recommended, with some additions and modifications.

The Merewether and Price Report

165. The Merewether and Price Report is of great assistance in understanding the processes to which the Regulations referred, the terminology used in the Regulations, and the mischief which the Regulations were intended to address. For these reasons, I shall consider the Report, and the subsequent Conferences Report, in greater detail than would otherwise be appropriate.

166. As its title indicates, the Merewether and Price Report was concerned with "the asbestos industry". It reported the results of an investigation which was instituted, following the discovery in 1928 of fibrosis of the lungs in an asbestos worker named Seiler, in order to determine "whether the supervention of this disease in an asbestos worker was an exceptional occurrence, or evidence of a grave health risk in the industry." (p 5).

167. While the object of the investigation concerned the asbestos industry generally, the nature of the investigation necessitated a focus upon workers as nearly as possible exposed to pure asbestos dust: that is to say, those employed in the textile branch of the industry, those employed in the branch manufacturing insulating materials from practically pure asbestos, and those employed in some preliminary processes in other branches. The results were analysed on a number of bases, including the processes in which the workers were employed. For that purpose, a number of different processes within the asbestos industry were identified, and "similar processes" were grouped together. The first group of similar processes was "crushing, opening, disintegrating and mixing" (p 11). The implication is that "mixing" was a process within the asbestos industry, related in a relevant way to crushing, opening and disintegrating. That is consistent, as I have explained, with the grouping of these processes together in paragraph (i) of the 1931 Regulations and in regulation 1(a).

168. Processes were also grouped together for the purpose of determining the levels of dust which they generated. For that purpose, one group was "opening and handling fibre, without local exhaust ventilation". This group was described as including opening, sieving, shovelling or otherwise handling asbestos fibre, and sack filling by hand in a settling chamber (p 12). Opening and sieving both fall within the ambit of paragraph (i) of the Regulations, as I have explained, and shovelling or otherwise handling asbestos fibre, and sack filling by hand, would also appear to fall within paragraph (i) as "processes involving manipulation of asbestos incidental thereto". "Manipulation of asbestos by hand" and "the filling or emptying of sacks" also fall within the ambit of regulation 1(d) and (e) respectively.

169. Analysing the statistics in this way, it was concluded:

i) that there was a correlation between the dustiness of processes, and the length of time during which workers were employed in those processes, and the incidence of fibrosis; and

ii) that "it seems necessary for the production of generalised fibrosis of the lungs that a definite minimal quantity of dust must be inhaled", with the important implication that "the reduction of the concentration of dust in the air in the neighbourhood of dusty asbestos processes will cause … the almost total disappearance of the disease" (p 15).

The outcome of the investigation was thus to establish "the existence of a definite occupational risk in the asbestos industry" (p 16). The risk took the

form of "a distinct type of fibrosis of the lungs" (p 16). It was found that "the incidence rate is highest in the most dusty processes and amongst those longest employed" (p 17).

170. Part II of the report contained the recommendations to which the letter of 15 September 1931 referred. It began by noting the recent development and rapid expansion of "the asbestos industry", mainly because of the demands of other industries, and the increasing attention paid to the insulation of steam plant to promote fuel economy (p 18). Asbestos products were divided for convenience into seven main groups:

"Textiles

(a) Yarn and cloth.

Non-Textiles

(b) Millboard, paper, asbestos-cement sheets, tiles, and other building materials, sheet material of rubber or bituminous mixtures containing asbestos.
(c) Insulation materials and articles.
(d) Brake and clutch linings.
(e) Packing and jointings.
(f) Asbestos-covered electric conductors - electrodes, cables and wiring, coils for electric machinery.
(g) Miscellaneous, including moulded electrical and other goods, etc." (p 18)

171. In relation to group (a), the Report noted that some asbestos textile products were produced for use in the manufacture of other products, including products in groups (c), (d), (e), (f) and (g) (p 19). In relation to group (c), the Report stated:

"Insulation materials include fiberized asbestos; 'magnesia', so-called containing about 15% of fiberized asbestos and 85% of magnesia, and other finely divided mixtures composed partly of fiberized asbestos, used as insulating cements or plasters; fiberized asbestos stiffened into thick sheets, like mats, for lining bulkheads of ships; shaped sections and slabs, moulded from fiberized asbestos or mixtures containing it, or built up of corrugated asbestos paper so as to enclose air cells;

> mattresses, made of asbestos cloth and filled with fiberized asbestos, magnesia, or other filling." (p 19)

172. The Report noted that work involving the use of asbestos products was carried on in other premises besides factories, the most important being insulation work, much of which was carried on by contractors (p 19). The Report did not discuss any risks which might be associated with such work, which could only have been fully addressed by legislation of wider scope than regulations made under the Factories Acts.

173. Some conclusions can be drawn from this discussion about the sense in which the Report referred to "the asbestos industry". As the groups of products indicate, it comprised factories and workshops which manufactured products (or repaired insulating mattresses) composed wholly or partly of asbestos. The manufacturing process employed at the factory did not however necessarily involve the use of the raw mineral. It might, as at factories producing articles in group (a), or it might not, as at factories producing articles in group (e). Nor did the manufacturing process necessarily involve the use of fiberized asbestos: as the Report stated, fiberized asbestos was used in large quantities in the manufacture of groups (a) to (c), but to a much smaller extent in some of the other factories and workshops (p 19). As I shall explain, the factory might therefore be one where substantial quantities of asbestos dust were produced, or it might not.

174. In relation to the processes and preventive measures required, the Report focused on the dust-producing processes. In relation to group (a), the Report stated:

> "Asbestos, suitable for yarn, has usually to be crushed, and in all cases 'opened' ('fiberized') before it is ready for carding. These preparatory processes are effected by machinery, but entail much handwork. Separating (to remove iron) and grading or sieving follow crushing, but precede opening. Material for yarn is not usually treated in disintegrators, but in most factories these machines are used for fiberizing waste asbestos yarn, etc. Crushing flattens out and breaks up the mineral without damaging the fibres. It is accomplished either in a large edge runner, or in a small pan mill of the mortar mixing type. The material is emptied upon the floor close to the machine, the contents of several sacks sometimes being spread on the floor to obtain a rough 'mixing'." (pp 20-21)

This description of the preparatory processes encompasses crushing, disintegrating, opening, sieving and "rough mixing".

175. "Mixing or blending" of the crushed asbestos was a further process, preparatory to "carding":

> "Crighton openers, enclosed centrifugal machines, are used for opening crushed asbestos, preparatory to carding. Careful mixing or blending of crushed material is effected by spreading it evenly in layers on the floor over a considerable area – cotton may be added at this stage if required – and when feeding, taking a vertical cut through the mass … Mixing is a great hindrance to elimination of hand work; it is asserted that poor yarn results if it is not done and that machine mixing has been tried and gave less satisfactory results. If retained, it should be done at a higher level than the opener, under a large exhausted canopy and the mixture fed at a series of chutes." (p 21).

One sees here the alternatives addressed in the Regulations - mixing machines, dealt with in regulation 1(a), and mixing or blending by hand, dealt with in regulation 2 – and the background to the requirement that they should each be carried on with an exhaust draught.

176. In relation to the non-textile sector, the Report noted that fiberized asbestos was not used in some of the factories, and that exposure to dust might be slight or even negligible (p 26). Fiberizing was almost exclusively confined to works in groups (b) and (c), ie works manufacturing millboard and similar products, and works manufacturing insulation materials. Dust was evolved in factories or departments where fiberized asbestos was prepared for subsequent use or for sale, and also in departments where fiberized material, or dry mixtures containing it, were manipulated in preliminary manufacturing processes. Finishing processes involving abrading or cutting could also be a source of dust, but such dust might contain only a small percentage of asbestos.

177. In relation to group (c), the Report explained that fiberized asbestos was a component of many insulating materials which might also contain other materials. It stated:

> "In many small works the materials are mixed 'dry', by hand, in an open manner, involving sack emptying and filling,

> shovelling and weighing. Enclosed rotary mixers could apparently be used for such work with exhaust applied at feeding points and the material discharged and bagged under enclosed conditions. If hand work is retained, exhaust should be applied." (p 27)

178. The mixing of fiberized asbestos with other materials was also an aspect of the manufacture of some products in groups (f) and (g). In particular, the production of moulded goods could involve the mixing of asbestos paste using dry materials. The mixing of asbestos putty also involved the handling of dry materials (p 30).

179. Relating this discussion to the preamble to the Regulations, it will be recalled that the first proviso excludes the application of the Regulations to any factory or workshop, or – it is important to note - any part of a factory or workshop, where any of the following processes is carried on:

(1) the process of mixing asbestos;
(2) the repair of insulating mattresses;
(3) sawing, grinding, turning, abrading and polishing, in the dry state, of articles composed wholly or partly of asbestos in the manufacture of such articles; and
(4) any cleaning of machinery or other plant used in connection with any such process.

The exclusion is subject to two conditions. First, the process or work must be carried on occasionally only, and no person must be employed in it for more than eight hours a week. Secondly, no other process specified in the preamble to the Regulations must be carried on in the place in question.

180. It is difficult to envisage circumstances in which the proviso would apply to factories or workshops producing goods in groups (a), (b) or (c), since, even if there were parts of such factories where only the activities mentioned in the proviso were carried on, it seems unlikely that those activities would be carried on only occasionally. In some factories producing goods in groups (e), (f) and (g), on the other hand, the position might be different. Given the variety of products which such factories might produce, and the variety of processes involved, it is possible to envisage situations where the first or second proviso might apply. Such factories might for example produce a range of goods, most of which did not include asbestos, but which required the occasional mixing of asbestos, or some other process, such as grinding, or the repair of insulating mattresses, which was mentioned in the proviso.

The report contains little discussion of factories of that kind, since for obvious reasons it focused upon factories where the risk to health from asbestos dust was greatest. The point is however illustrated by the discussion of factories producing cable and wiring, of which the report stated:

> "Asbestos-covered cable and wiring constitutes a small percentage of the output of the cable factories …The amount of dust evolved is small, and special precautionary measures are apparently not required." (p 30)

181. Returning to the Report, the section headed "Summary and Recommendations" began by noting that "asbestos factories and workshops cover a great variety of processes" (p 31). It observed that "the asbestos manufacturers" were confronted with the necessity of attaining conditions "in their industry" which would ensure much less dust in the atmosphere than could be tolerated in many comparable trades not using asbestos (p 31). As in the remainder of the Report, the focus of the recommendations was entirely on the asbestos industry, using that expression in the sense that I have explained.

182. The specific recommendations foreshadow the provisions of the Regulations. In particular, regulation 1(a) reflected recommendation 1(a), which was that exhaust ventilation should be provided for:

> "Dust-producing machines, eg
>
> > (i) Crushing, disintegrating, teasing and other opening machines; sieving machines; fibre grinding machines; dry mixing machines; rolls fed with dry mixings."

Regulation 2(a) was one of a number of regulations that reflected recommendation 1(e), which was that exhaust ventilation should be provided for:

> "Various hand operations, eg sack emptying and filling, weighing, mixing""

Regulation 2(b) was one of a number of regulations that reflected recommendation 7, which was that new factories should be laid out so as to avoid exposing workers to risk from processes upon which they were not engaged.

The Conferences Report

183. The Conferences Report was prefaced by a letter from the Chief Inspector of Factories to the Home Secretary dated 10 April 1931, which explained that the recommendations reflected an important assumption, namely "the existence of a critical limit of dust concentration below which workers may be employed without injury to health". As I have explained, that assumption is contradicted by more recent knowledge.

184. In the introductory section of the Report, it was noted that successful experiments had been carried out involving the application of exhaust to various processes, including "mixing and blending (in opening processes)" (p 6). It was also noted that the safe concentration of dust in workrooms had been taken, on the basis of the Merewether and Price Report, to be the conditions arising from flyer spinning of asbestos fibres. That criterion was said to be "simple to apply to processes such as mixing, blending … which are obviously more dusty than flyer spinning" (p 6). The recommendations focused upon the application of exhaust ventilation at dust-producing points, so as to meet that criterion.

185. The body of the Report set out the agreements arrived at. They were listed under headings, mostly descriptive of particular processes. The first heading was "Crushing, – including preliminary Sack Emptying, Rough Mixing on Floor near Crushers, Feeding and Discharging". Rough mixing of raw asbestos prior to crushing was therefore included within "crushing". It was agreed that a mechanical exhaust draught should be applied. This is reflected in regulation 1(a), which requires mechanical exhaust ventilation which prevents the escape of asbestos dust to be applied to "preparing", defined as meaning "crushing, disintegrating and any other process in or incidental to the opening of asbestos".

186. The second heading was "Mixing and Blending of Crushed Asbestos". It was agreed that this process, which was at the time carried on by hand in the textile industry, should also be subject to mechanical exhaust ventilation. Such ventilation had recently been applied by using an exhaust pipe above the mixing area. Although much dust was removed, it was unclear whether this arrangement would fully meet the case. That is reflected in regulation 2(a), which requires mixing or blending by hand of asbestos not to be carried on except with an exhaust draught so designed and maintained as to ensure "as far as practicable" the suppression of dust. Although it is not discussed in the Report, one might infer that it was because of the limited efficacy of exhaust ventilation of mixing or blending by hand that regulation 2(b) requires the provision of a dedicated room for that activity in premises

constructed after the date of the 1931 Regulations. It was also noted in the Report that enclosed mixing machines might be developed in the future. That possibility was addressed by regulation 1(a), in so far as it applies to "dry mixing machines".

Further agreements dealt with other specific processes used in the asbestos textile industry. In each case, a relationship can be seen between the agreement and a corresponding provision of the Regulations.

187. The Report did not deal with the mixing of opened asbestos with other materials: as I have explained (and as was noted in the Report, in its discussion of mattress making), mixtures of asbestos and other materials were not normally used in the textile branch of the asbestos industry. The mixing process involved would however fall within the ambit of either regulation 1(a) or regulation 2, depending on whether the mixing was carried out mechanically or by hand.

Did the 1931 Regulations in general, and regulation 2(a) in particular, apply?

188. In summary therefore, it could hardly be clearer, when regard is had to (1) the Reports which preceded the certification under section 79 of the 1901 Act, (2) the terms of that certification, (3) the recommendations which the 1931 Regulations were intended to implement, and (4) the terms of the Regulations themselves, that the Regulations in general did not apply to the power station by virtue of the work being carried on there by the laggers, and that regulation 2(a) in particular did not apply to that work. In the first place, the Regulations applied only to factories and workshops in which one or more of the processes listed in the preamble was carried on: the term "mixing", as employed in paragraph (i) of the preamble, had a technical meaning, and described particular processes carried on in the asbestos industry. Those processes were, first, mixing or blending of crushed asbestos preparatory to its being opened, and secondly, mixing of opened asbestos with other materials as part of the process of manufacturing asbestos products such as the insulation material used by laggers. Those processes were not carried on at the power station. The Regulations therefore did not apply to it: it was not a place where "mixing", within the meaning of paragraph (i), was carried on. Secondly, for the same reason, regulation 2(a) did not apply to the work carried on by the laggers, as it did not involve "mixing or blending by hand of asbestos" within the meaning of the Regulations.

The authorities

189. That conclusion is consistent with the authorities in which the scope of the 1931 Regulations has been considered. It appears to have been only in relatively recent years that any suggestion was made that the Regulations might apply in circumstances such as those of the present case. The point was however argued in the case of *Banks v Woodhall Duckham Ltd*, Court of Appeal (unreported), 30 November 1995, which concerned a pipe fitter who suffered injury after being exposed to asbestos dust while working in various premises. They included a steel works where he was exposed to dust created by laggers using insulation materials containing asbestos, which they mixed with water to create a paste. A claim under the 1931 Regulations failed, in the first place, because the claimant's evidence was rejected. The court also accepted submissions to the effect that the Regulations were concerned with processes carried on in the asbestos industry, understood as meaning processes in the manufacture of asbestos products, and processes preliminary to such manufacture, and did not apply to the lagging of pipes in the steel industry.

190. The same conclusion was reached by Lord Gill in the Outer House of the Court of Session in *Watt v Fairfield Shipbuilding & Engineering Co Ltd* 1999 SLT 1084, in which the pursuer had been exposed to asbestos dust while working on board ships under construction in shipyards. As in the present case, the source of the dust was insulation material. Lord Gill considered that "the Regulations related to those processes by which the raw material was treated in the course of its being manufactured into asbestos products of various kinds". That was also the interpretation for which the appellants argued in the present appeal. Although I agree with Lord Gill's decision on the facts of the case, I would not define the scope of the Regulations as narrowly as that: as I have explained, the asbestos industry is not confined, for these purposes, to factories or workshops where the raw mineral is treated, but includes, for example, those which manufacture products classified in the Merewether and Price Report as falling into groups (d), (e) and (f).

191. The first case in which a detailed consideration of the background to the Regulations was undertaken was *Cherry Tree Machine Co Ltd v Dawson* (sub nom, *Jeromson v Shell Tankers (UK) Ltd*) [2001] EWCA Civ 101; [2001] ICR 1223. So far as relevant, the case concerned a claim under the 1931 Regulations arising from a person's employment in a factory which manufactured dry cleaners' presses. The manufacturing process involved the use of fiberized asbestos, mixed with water, to form a seal around the platens of the presses: the asbestos sealant was designed to prevent steam from escaping when the presses were used. An appeal by the employer against a finding of liability under regulation 2 was dismissed.

192. That conclusion is consistent with my interpretation of the Regulations. The presses were, in the language of the Regulations, articles composed partly of asbestos. The mixing of asbestos in the factory formed part of the process of manufacturing the presses. As Hale LJ observed at para 11, the process was similar to the asbestos putty mixing which had been mentioned in the Merewether and Price Report.

193. Hale LJ also observed at para 20 that the scope of the Regulations is not confined to factories and workshops whose only or main business is the processing of raw asbestos or the manufacture of products made out of raw asbestos, as Lord Gill had considered in the case of *Watt*. She accordingly rejected a submission that the Regulations applied only to the "asbestos industry", understood in the sense which Lord Gill had favoured. As she observed at para 20, nowhere in the Regulations was it said that they applied only to factories and workshops whose only or main business was the processing of raw asbestos or the manufacture of products made out of raw asbestos. Furthermore, as she observed at para 22, the Merewether and Price Report clearly contemplated the mixing of asbestos in the manufacture of a wide variety of products, not just "asbestos products" in the narrow sense that had been argued for.

194. I respectfully agree with that interpretation of the Regulations. As I have explained, the construction favoured by Lord Gill would be inconsistent with the intention to implement the recommendations of the Merewether and Price Report, since it would effectively confine the scope of the Regulations to groups (a) to (c) of the factories and workshops mentioned in the Report, and leave groups (d) to (g) out of account. The broader understanding of "the asbestos industry" which I have explained is also important in understanding the provisos to the preamble to the Regulations: since the Regulations applied to all factories or workshops any part of whose business was the making of asbestos products (or the repair of insulating mattresses), the enactment of a proviso exempting factories or workshops, or parts of them, which carried out certain types of work only occasionally is not difficult to understand.

195. Hale LJ was also critical of the observations made in *Banks*, and followed in *Watt*, to the effect that the Regulations did not apply to the mixing of lagging paste by laggers. As I have indicated, her criticisms of the reasoning in those cases were well-made, and were necessary to her decision: in particular, her rejection of the argument that the Regulations were confined to processes involving the use of raw asbestos. In so far as her observations went beyond what was necessary for the decision of the appeal, and suggested that it was "more likely" (para 25) that the Regulations applied to the mixing of lagging paste by laggers, they were obiter, and I would respectfully take a different view, for the reasons I have explained.

196. In the present case, it was argued before the Court of Appeal, as before this court, that "mixing", within the meaning of the 1931 Regulations, meant mixing prior to opening (ie what I have described as "rough mixing" and "mixing or blending"), but did not include the mixing of fiberized asbestos with other substances. On that basis, it was argued that the case of *Cherry Tree* had been wrongly decided. McCombe LJ, with whose reasoning on this matter the other members of the court agreed, saw force in the submission, but considered that the court was bound by the decision in *Cherry Tree.*

197. As I have explained, I construe the term "mixing", in the light of the Merewether and Price Report and its recommendations, as including mixing prior to opening, but also as including the mixing of fiberized asbestos with other substances, provided it is carried out by the asbestos industry: that is to say, provided it forms part of the process of producing a product composed wholly or partly of asbestos. On that basis, the case of *Cherry Tree* appears to me to have been correctly decided, as I have explained. The decision (as distinct from some observations which were strictly obiter) does not however entail that the work of laggers falls within the scope of the Regulations. Consistently with the decisions (as distinct from some of the reasoning) in *Banks* and *Watt*, I consider that such work is beyond the scope of the Regulations.

Subsequent legislation

198. It is noteworthy that subsequent legislation was made on the basis of the understanding of the 1931 Regulations which I have explained. In 1967 the Ministry of Labour and HM Factory Inspectorate published a memorandum, "Problems arising from the use of Asbestos" (36-316), which noted that the Regulations applied to around 300 factories. In the majority of those factories, only a very small proportion of employees were employed on asbestos processes. The principal forms of employment subject to the Regulations were said to be the production of asbestos cement products, asbestos textiles and brake linings for motor vehicles (para 10).

199. A table listed factories and warehouses handling asbestos where the Regulations did not apply. These included electricity generating, where the relevant activity was identified as lagging and de-lagging (Table 4). The same table also listed generating stations amongst the places where contractors carrying out work involving the use of asbestos could be found. The memorandum stated in terms that "the Asbestos Industry Regulations do not apply to lagging and insulation operations using asbestos" (para 13). It noted that other employees working in the neighbourhood of lagging and insulation operations must also undergo considerable exposure to asbestos (para 13).

The memorandum referred to evidence of an increasing incidence of asbestosis, particularly amongst laggers, who tended to be excluded from the scope of the Regulations (para 18). It also referred to evidence linking exposure to asbestos to various types of cancer, including mesothelioma.

200. The Government responded by informing Parliament that it intended to introduce regulations to "cover all the industries and processes in which asbestos is used, including occupations such as lagging and de-lagging, thermal and sound insulation" (Hansard, 10 July 1967, col 88). The 1969 Regulations were subsequently made. They applied specifically to electrical stations (regulation 3(1)) as well as to a wide range of other premises. They applied to "every process involving asbestos or any article composed wholly or partly of asbestos, except a process in connection with which asbestos dust cannot be given off" (regulation 3(2)), and imposed obligations on employers as well as occupiers (regulation 5(1)).

201. This material cannot be used as an aid to the interpretation of the 1931 Regulations. It is nevertheless a matter of legitimate comment that the interpretation of the Regulations which is favoured by Lord Kerr is inconsistent with the basis on which the 1969 Regulations were made.

Was Mr McDonald within the scope of the 1931 Regulations in any event?

202. The parties addressed the question whether, even assuming that the 1931 Regulations applied to the activities of the laggers at the power station, any duty was owed to Mr McDonald, since he was not employed in the process which generated asbestos dust.

203. The Regulations were made under section 79 of the 1901 Act, the terms of which have been quoted. That Act was repealed by the 1937 Act, which however contained a saving proviso in section 159(1), the effect of which was that the 1931 Regulations were deemed to have been made under section 60(1) of the 1937 Act. The 1937 Act was in turn repealed by the Factories Act 1961 ("the 1961 Act"), which contained a similar proviso in paragraph 1 of Schedule 6. The result was to deem the 1931 Regulations to have been made under section 76(1) of the 1961 Act, which provides:

> "Where the Minister is satisfied that any manufacture, machinery, plant, equipment, appliance, process or description of manual labour is of such a nature as to cause risk of bodily injury to the persons employed or any class of those persons,

> he may, subject to the provisions of this Act, make such special regulations as appear to him to be reasonably practicable and to meet the necessity of the case."

204. In *Canadian Pacific Steamships Ltd v Bryers* [1958] AC 485, the House of Lords took as its starting point, in deciding whether the plaintiff fell within the scope of regulations made in 1931 under section 79 of the 1901 Act, the terms of section 79 itself, on the basis that the 1937 and 1948 Acts could not give a wider meaning to the regulations than they had borne when they were made (it was assumed that the power conferred by section 60(1) of the 1937 Act as amended was no narrower than the power conferred by section 79 of the 1901 Act). Section 79 of the 1901 Act was construed as empowering the Secretary of State to make regulations which enured for the benefit of persons employed in the factory, even if they were not employed in the process which caused the danger or injury to health or the danger to life and limb and thus brought about the certificate. As Viscount Kilmuir LC observed at p 501, it was obvious that such a process, unless regulated, might be dangerous to others whose ordinary work in the factory brought them into regular proximity to the danger.

205. Bearing in mind that the Regulations are now deemed to have been made under section 76(1) of the 1961 Act, the position is equally clear: that section refers generally to "the persons employed", a form of words which was considered in the *Canadian Pacific Steamships* case to enable regulations to be made which protected persons who were employed in the factory but not in the relevant processes. There is nothing in the Regulations themselves that indicates an intention to restrict the scope of the duty to those directly engaged in the specified processes. Such an intention appears unlikely, since the Merewether and Price Report had made it clear that the risk to health caused by asbestos dust was not confined to those directly employed in the relevant process, but also affected other workers in the same workroom.

206. It was also argued in the present appeal that no duty was owed to Mr McDonald in any event, since he was not a "person employed" in the power station. It will be necessary to return to that question in the context of the duty imposed by section 47(1) of the 1937 Act.

Part 3: Section 47(1) of the 1937 Act

207. It is necessary next to consider the cross-appeal, which concerns the effect of section 47(1) of the 1937 Act. It provides:

> "In every factory in which, in connection with any process carried on, there is given off any dust or fume or other impurity of such a character and to such extent as to be likely to be injurious or offensive to the persons employed, or any substantial quantity of dust of any kind, all practicable measures shall be taken to protect the persons employed against inhalation of the dust or fume or other impurity and to prevent its accumulating in any workroom, and in particular, where the nature of the process makes it practicable, exhaust appliances shall be provided and maintained, as near as possible to the point of origin of the dust or fume or other impurity, so as to prevent it entering the air of any workroom."

208. Section 47(1) applies in two situations. The first is where there is given off any dust or fume or other impurity of such a character and to such extent as to be likely to be injurious or offensive to the persons employed. Mr McDonald did not pursue any case based upon that branch of the provision. The second situation is where there is given off "any substantial quantity of dust of any kind". Mr McDonald relied upon that branch of the provision.

Was there "any substantial quantity of dust"?

209. The first issue which arises is whether, on the evidence, it has been established that there was any substantial quantity of dust given off in the power station at any relevant time. In that regard, a difficulty arises for Mr McDonald from the absence of reliable evidence as to the quantity of dust given off during his visits to the power station. The trial judge made no finding on the point. The Court of Appeal concluded that, on the evidence, Mr McDonald had failed to establish that a substantial quantity of dust had been given off. This court does not in my view have a proper basis for reaching a different conclusion. It follows that the claim under section 47(1) must be rejected.

Was Mr McDonald a "person employed"?

210. A further question which was argued was whether in any event any duty was owed under section 47(1) to Mr McDonald. Was he one of "the persons employed", within the meaning of the section? It was argued on behalf of the appellants that he was not. Reliance was placed on the decisions of Rose J in *Morrison v Central Electricity Generating Board* (unreported), 15 March 1986, and of the Court of Appeal in *Banks v Woodhall Duckham Ltd* (unreported), 30 November 1995, where the view was taken, as a matter of

grammatical analysis, that the words "the persons employed", in section 47(1), referred back to the phrase "in connection with any process carried on". That decision was followed by the Court of Appeal in the present case.

211. I am unable to agree with that construction. The verb which governs the preposition "in", in the phrase "in connection with any process carried on", is not "employed" but "given off" ("in connection with any process … there is given off"). It is therefore the dust that must be connected to the process, rather than the persons employed. An alternative possibility, that the words "the persons employed" might refer back to the phrase "in the factory", must also be rejected: the verb which governs the preposition "in", in the phrase "in every factory", is not "employed" but "taken" ("in every factory … all practicable measures shall be taken").

212. Greater assistance can be obtained from considering section 47(1) in the context of the 1937 Act as a whole. In the *Morrison* case, Rose J contrasted section 63 of the 1961 Act (the successor provision of section 47 of the 1937 Act) with section 14(1) (the obligation to fence dangerous machinery), which imposed a duty with regard to "every person employed or working on the premises". The same contrast could also be drawn between sections 14(1) and 47(1) of the 1937 Act. On the other hand, as Buxton J observed in *Owen v IMI Yorkshire Copper Tube* (unreported), 15 June 1995, the difference between those provisions is less striking than the difference between section 47(1) of the 1937 Act and section 49. The latter provision, which is concerned with the protection of the eyes, imposes a duty in respect of "the persons employed in the process". Given that sections 47 and 49 appear in the same group of sections, the use of that limiting phrase in one section but not in the other is a strong reason for believing that the scope of section 47(1) was not intended to be limited, by implication, in the same way as section 49 was limited by express provision.

213. Apart from these textual pointers, it is also necessary to consider what Parliament is likely to have intended. The phrase "the persons employed" identifies the persons to whom the statutory duty is owed. The duty is to take specified precautions in every factory in which, in connection with any process carried on, there is given off any dust or fume (or other impurity) of a particular description: either the dust or fume must be of such a character and extent as to be likely to be injurious or offensive to the persons employed, or the quantity of dust must be substantial. In such circumstances, there is a duty to take all practicable measures to protect the persons employed against inhalation of the dust or fume, and to prevent its accumulating in any workroom.

214. Considering first the situation where injurious or offensive dust or fumes are given off, it would not make sense for the duty to be confined by law to the persons employed in the process in question. Although those persons would be most directly exposed to the dust or fumes, and would therefore be at the greatest risk of harm, it is perfectly possible that other persons might also be liable to inhale the dust or fumes and would also be at risk. There might, for example, be other persons working in the workroom where the dust or fumes were generated – a problem which had been highlighted by the Merewether and Price Report - or persons who passed through the workroom in the course of their employment. If they inhaled the dust or fumes and suffered injury, why should they not fall within the scope of the statutory duty? To confine the duty in such a way as to exclude *a priori* a category of persons who were liable to suffer the injury sought to be guarded against would be inconsistent with the apparent intention to protect those at risk.

215. In the light of that consideration, and also the contrast between sections 47(1) and 49, the phrase "the persons employed" should not therefore be construed as being restricted to the persons employed in the process in connection with which the dust or fume is given off. The only feasible alternative is that the phrase is intended to refer to the persons employed in the factory.

216. If that is the correct construction of the phrase in its application to the first situation addressed by section 47(1), it seems to me that it must also be the correct construction in relation to the second situation, where a substantial quantity of dust is given off. There is nothing in the section to suggest that the phrase has two different meanings, depending upon which of the alternative situations exists.

217. The question then arises whether Mr McDonald was one of the "persons employed" in the power station. There are numerous authorities on the meaning of the phrase "the persons employed", where used in the Factories Acts. It is clear that the phrase is not confined to the employees of the occupier of the factory: see, for example, *Massey-Harris-Ferguson (Manufacturing) Ltd v Piper* [1956] 2 QB 396, where it was held to extend to a painter, employed by an independent contractor, carrying out painting work in a factory. It does not however extend to a fireman who enters a factory in order to put a fire out (*Hartley v Mayoh & Co* [1954] 1 QB 383), or to a police constable who enters a factory in pursuit of a felon (*Wigley v British Vinegars Ltd* [1964] AC 307, 324 per Viscount Kilmuir), although he is a person and he is employed. In *Canadian Pacific Steamships Ltd v Bryers* [1958] AC 485, 504 Viscount Kilmuir considered that the phrase applied to "any person who is employed in the factory whether the direct servant of the occupier or a servant of an independent contractor so long as he is employed upon work in that factory". Those words are however themselves little

clearer than the statutory phrase. In the later case of *Wigley v British Vinegars Ltd,* concerned with a window cleaner employed by an independent contractor, Viscount Kilmuir said at p 324:

> "In my view, the true distinction is between those who are to work for the purposes of the factory and those who are not. Clearly, maintenance of the factory is work for the purpose of the factory, while the arrest of a felon or the putting out of a fire is not, though it may benefit the factory indirectly. Window cleaning is part of the maintenance of the factory and in my view the deceased was within the protection afforded."

The other members of the House agreed.

218. It can fairly be said that the test laid down in *Wigley,* like the differently expressed test laid down in the *Canadian Pacific Steamships* case, can result in the drawing of fine distinctions without any compelling rationale beyond the need to draw a line somewhere. The present case might be regarded as an example. It could be argued that Mr McDonald was employed for the purposes of the power station, either on the basis that one of those purposes was the sale of the ash, and he was employed collecting ash which had been sold, or on the basis that the ash was a by-product which the power station had to dispose of, and he was employed removing it. The contrary view appears to me however to be more persuasive. Mr McDonald was not in reality working for the purposes of the power station. He was working solely for the purposes of his employer, the Building Research Establishment. It was the purchaser of the ash which was a by-product of the power station, and it employed Mr McDonald to collect the ash in his lorry. A customer of a factory can hardly be regarded as working for the purposes of the factory, even if he goes there in person to collect the article purchased; and a person whom he employs to collect the article from the factory can hardly be in a different position. Although the sale of such articles would no doubt be one of the purposes of the factory, and the sales staff would therefore fall within the scope of the legislation, the collection of the articles by or on behalf of purchasers is not in the same position.

219. On that ground, as well as on the basis that it had not been proved that any substantial quantity of dust was given off, the Court of Appeal was correct to reject the claim under the 1937 Act. It also follows that the claim under the 1931 Regulations would have to be rejected for the same reason, even if, contrary to my conclusion, the Regulations had applied to the work being carried on by the laggers.

Does a claim lie only if a substantial quantity of dust was inhaled?

220. A further issue which was argued is whether, as was maintained on behalf of Mr McDonald, a claim lies under section 47(1) whenever (a) a substantial quantity of dust is given off in connection with a process carried on in a factory, (b) there has been a failure to take all practicable measures to protect the persons employed against inhalation of the dust, and (c) a person employed has suffered injury caused by inhalation of dust given off by the relevant process. It was argued on behalf of the appellants that it was not enough that the injury should have been caused by the inhalation of any of the dust: in order to have a claim under the section, the dust must have been substantial in quantity at the point when it was inhaled by the claimant.

221. It was argued on behalf of the appellants that, as a matter of textual analysis, when section 47(1) imposed a duty to take all practicable measures to protect the persons employed against inhalation of "the dust", those words could only mean the substantial quantity of dust said to give rise to the duty, with the implication that the duty was only to protect against inhalation of a substantial quantity of dust.

222. That argument appears to me to be fallacious. It is plainly correct that the words "the dust" refer to the substantial quantity of dust given off. There is therefore a duty to protect the persons employed against the inhalation of that dust. It does not however follow that the duty applies in respect of a particular person only if that person is individually liable to inhale a substantial quantity of the dust. One might as well argue that, if a manufacturer sold "a substantial quantity of ginger beer" which was contaminated with snails, and was under a duty to take precautions to prevent customers from consuming "the ginger beer", it followed that the duty was only to protect against the consumption of a substantial quantity of the ginger beer.

223. It might alternatively be argued that the duty imposed by section 47(1) in respect of "any substantial quantity of dust" is in reality unlikely to have been intended to confer a right of action upon an employee who suffered injury as a result of inhaling an insubstantial quantity of dust. In support of that view, it might be said that Part IV of the 1937 Act, and section 47(1) in particular, are intended to protect the health of employees. Section 47(1) begins by addressing the situation where dust is given off of such a character and to such an extent as to be likely to be injurious to health. The part of section 47(1) concerned with "any substantial quantity of dust" cannot therefore be concerned with dust which is known to be inherently harmful to health, since that danger has already been addressed. Its concern must be the risk to health which exists where any dust is given off in substantial quantity. That risk

derives from the high concentration of dust in the air which is inhaled. Once the dust has become dispersed in the atmosphere, that risk disappears.

224. This argument can be analysed:

(1) as restricting the category of person to whom a duty is owed under the relevant limb of section 47(1) to persons employed who inhale dust which is substantial in quantity, or

(2) as restricting the type of injury for which a claim can be brought under the relevant limb of section 47(1) to injury which is caused by the inhalation of dust which is substantial in quantity.

The first is an argument about the scope of the statutory duty. The second is an argument about remoteness of damage. Each is in my opinion fallacious.

225. Considering first the scope of the duty, this has already been discussed. It depends on the meaning of "the persons employed". For the reasons explained earlier, those words must refer to all the persons employed in the factory.

226. So far as remoteness is concerned, when Parliament enacted section 47(1) it imposed on employers a duty to take all practicable measures "to protect the persons employed against inhalation of the dust", whenever any substantial quantity of dust was given off in connection with any process carried on in a factory, and imposed civil liability for a breach of the duty which caused injury. It did not impose liability only if the breach caused injury in a particular way. As Lord Reid said in *Grant v National Coal Board* [1956] AC 649, 661:

> "I cannot see why it should matter just how the accident was caused provided that it was in fact caused by a breach of the section. I see no ground for imputing to Parliament an intention to make the mineowner liable for some of the consequences of breach but to relieve him of liability for others."

227. If therefore there was a breach of the duty imposed by section 47(1), in that a substantial quantity of asbestos dust was given off in connection with a process carried on in the power station and all practicable measures were not

taken to protect the persons employed against inhalation of the dust, and if a person employed suffered physical injury caused by the inhalation of the dust, it cannot matter that the precise illness, or the way in which it was caused by the inhalation of the dust, was not foreseeable at the time when the statute was enacted: *Hughes v Lord Advocate* [1963] AC 837.

228. The point is illustrated by the case of *Gregson v Hick Hargreaves & Co Ltd* [1955] 1 WLR 1252, where the plaintiff had suffered illness as a result of inhaling noxious particles of silica which formed part of a substantial quantity of dust given off by a process. The presence of the silica, and its harmfulness, had not been known at the time. The defendants' argument that they should not be held liable was rejected. Jenkins LJ observed at p 1266 that the duty of employers was to take all practicable measures to protect their workpeople from the inhalation of dust, and their duty to do that did not depend on the question whether the dust was known or believed to be noxious or not.

229. Finally, in relation to this branch of the appeal, I should record that no issue was raised as to whether the dust generated by the work carried out by the laggers in the power station was given off "in connection with any process carried on" there, within the meaning of section 47(1).

Conclusion

230. For the reasons I have explained, I would allow the appeal and dismiss the cross-appeal.