WORKERS COMPENSATION COMMISSION

DETERMINATION OF APPEAL AGAINST A DECISION OF THE COMMISSION CONSTITUTED BY AN ARBITRATOR

CITATION:	**Maclean and District Bowling Club Co-operative Ltd v Green [2014] NSWWCCPD 53**
APPELLANT:	Maclean and District Bowling Club Co-operative Ltd
RESPONDENT:	Susan Amanda Green
INSURER:	CGU Workers Compensation (NSW) Ltd
FILE NUMBER:	A1-12059/12
ARBITRATOR:	Mr R Caddies
DATE OF ARBITRATOR'S DECISION:	2 May 2014
DATE OF APPEAL DECISION:	14 August 2014
SUBJECT MATTER OF DECISION:	Disease; lung cancer; passive smoking; whether employment in the club and hotel industry was employment to the nature of which the disease of lung cancer was due; whether employment a substantial contributing factor to the injury; whether lung cancer is a disease which is of such a nature as to be contracted by a gradual process; failure to consider relevant evidence; failure to engage with competing evidence; failure to properly determine issues in dispute; ss 4(b)(i) and 15(1) of the *Workers Compensation Act* 1987; calculating time to appeal; appeal filed out of time; extension of time to appeal; s 352(4) *Workplace Injury Management and Workers Compensation Act* 1998; Pt 16 r 16.2(2) of the *Workers Compensation Commission Rules* 2011
PRESIDENTIAL MEMBER:	Deputy President Bill Roche
HEARING:	On the papers
REPRESENTATION:	**Appellant:** Moray & Agnew **Respondent:** Whitelaw McDonald

ORDERS MADE ON APPEAL:

1. The name of the appellant employer is amended to be Maclean and District Bowling Club Co-operative Ltd.

2. Time to appeal is extended until 2 June 2014.

3. Leave to appeal is granted.

4. The Arbitrator's determination of 2 May 2014 is revoked and the matter is remitted to a different Arbitrator for re-determination.

5. Costs of the first arbitration, and of the second arbitration, are to follow the outcome of the second arbitration.

6. The appellant employer is to pay two thirds of the respondent worker's costs of the appeal. That two-thirds proportion is assessed at $1,685 plus GST.

INTRODUCTION

1. The worker in this appeal was diagnosed with lung cancer in January 2002. She alleged that she contracted that disease due to exposure to environmental tobacco smoke in the course of her employment as a bar attendant in the liquor and club industry for either 26 or 28 years between 1975 and 2002, having been a regular smoker for many years up to either 1991 or 1997, depending upon which evidence is accepted.

2. Before the Arbitrator, the worker succeeded with her claim against the last employer who, the worker alleged, employed her in employment to the nature of which the disease was due. The employer has appealed.

3. The main issues on appeal are whether the worker's employment with the appellant employer was employment to the nature of which the disease was due, whether her employment overall was a substantial contributing factor to the contraction of the disease, whether the Arbitrator determined all issues in dispute and whether the Arbitrator gave adequate reasons for his decision.

BACKGROUND

4. The respondent worker, Susan Green, started work in the hotel and club industry in 1975, when she was 18 years of age. She worked as a bar attendant for several different clubs or hotels until she started work, in the same capacity, with the appellant employer, Maclean and District Bowling Club Co-operative Ltd (the appellant/the Club), in December 1996 (by consent the employer's name has been amended to delete Co-Op and insert Co-operative). She continued with the appellant until she stopped work on 18 January 2002, when she was diagnosed with lung cancer, though she did not formally resign until 4 September 2002. She alleged that all of her jobs in the liquor industry exposed her to environmental tobacco smoke from cigarettes.

5. On 24 April 2012, Ms Green claimed lump sum compensation under ss 66 and 67 of the *Workers Compensation Act* 1987 (the 1987 Act) for impairments that resulted from her lung cancer and its complications. She alleged that she received an injury as defined in s 4(b)(i) of the 1987 Act. That is, that her injury was a disease which was contracted by her in the course of her employment and to which her employment was a contributing factor. To succeed, she also had to prove that the employment concerned was a substantial contributing factor to the injury (s 9A of the 1987 Act).

6. Ms Green's case against the appellant was that her injury was a disease of such a nature as to be contracted by a gradual process and that the injury was deemed to have happened at the time she made her claim for compensation on 24 April 2012 (s 15(1)(a)(ii)). She alleged that compensation was payable by the appellant as the "employer who last employed [her] in employment to the nature of which the disease was due" (s 15(1)(b)).

7. The appellant's insurer, CGU Workers Compensation (NSW) Ltd (CGU), disputed liability on various grounds. The Arbitrator identified the following issues as having been agreed by the parties to remain in dispute:

> "(a) Whether [Ms Green] suffered injury within the meaning of s 4(b)(i) of the 1987 Act sub-issues of which are:
>
> (i) Whether [Ms Green] 'contracted' a disease.

(ii) Whether that disease was contracted by her in the course of employment.

(iii) Whether her employment was a substantial contributing factor to her injury.

(iv) Whether [Ms Green's] disease is a disease of gradual process for the purposes of s 15 of the 1987 Act.

(v) Whether [Ms Green's] employment in the registered club and hotel industry is an employment to the nature of which the disease of lung cancer is due.

(b) Whether [Ms Green's] employment with the [appellant] was an employment to the nature of which the disease is due.

(c) Whether or not the applicant is barred by the operation of s 254 and/or 261 of the *Workplace Injury Management and Workers Compensation Act* 1998 (the 1998 Act)."

8. In a reserved decision delivered on 2 May 2014, the Arbitrator said (at [25]) that the insurer's s 74 notice had not disputed that lung cancer is a disease and he did not think it appropriate, in the absence of a formal application, to allow it "at this point". He said (at [26]) that there was no dispute by the insurer that the disease was one of gradual onset or of gradual process.

9. On the issue of whether Ms Green's employment with the appellant was "employment to the nature of which the disease was due" the Arbitrator said (at [27]), after referring to several authorities on that issue, that he accepted that all of Ms Green's employments in the liquor and club industry had been "employments to which the nature of the disease of lung cancer is due". He added that it did not matter that Ms Green's employment with the appellant may not have caused, aggravated or accelerated the "process", provided that her employment (with the appellant) was of the class of employment to which the disease was due.

10. Turning to whether "the employment concerned" had been a substantial contributing factor to the injury (s 9A of the 1987 Act), the Arbitrator said that the "employment concerned" related to the class of employment, not merely the last employment "of the relevant type". He concluded that the environmental tobacco smoke to which Ms Green had been exposed in the liquor and club industry between 1975 and 2002, "substantially contributed to the contraction of [Ms Green's] lung cancer and that this contribution was real and of substance, even if the comparative contribution of cigarette smoking is significantly greater in dosage". He made that finding even if Ms Green's smoking was also a "major contributing factor to the contraction of that disease" ([37]).

11. The Commission issued a Certificate of Determination on Friday, 2 May 2014 in the following terms:

"The Commission determines:

1. That the applicant satisfies, on the balance of probabilities, the requirements of the definition of injury within the meaning of section 4(b)(i) of the *Workers Compensation Act* 1987, namely that the worker contracted the disease of lung cancer in the course of her employment in the hotel and club industry and that

employment was a contributing factor to the contraction of the disease, even if cigarette smoking was also a major contributing factor to the contraction of that disease.

2. That the disease of lung cancer is one of gradual process.

3. That her employment in the liquor and gaming industry over 25 years by reason of the exposure to environmental tobacco smoke in such employment (up to January 2002) has been one to the nature [of] which the disease is due.

4. That the exposure to environmental tobacco smoke in such employment is a substantial contributing factor to the injury.

5. That the employment with the respondent is one to the nature [of] which the disease is due.

6. That the injury in question occurred on the date of the relevant claim for section 66 lump sum compensation, namely, 24 April 2012. (*Stone v Stannard Brothers Launch Services Pty Ltd* [2004] 1 DDCR 70) and that the defences under section 254 and 261 of the *Workplace Injury Management and Workers Compensation Act* 1998 fail: (*Gow v Patrick Stevedores No. 2 Pty Ltd* (2002) 24 NSWCCR 626).

7. That, by reason of the operation of section 15 of the *Workers Compensation Act* 1987, the respondent is the last relevant employer and is fixed with liability respect to the injury.

8. I remit the matter to the Registrar for referral to an Approved Medical Specialist on the following basis:-

   (a) Date of Injury: 24 April 2012 (deemed)
   (b) Matters for assessment: Respiratory system
   (c) Method of Assessment : Whole person impairment
   (d) Evidence

      (i) Application to Resolve a Dispute.

      (ii) Statement of SW Rose-Eyles (exhibit A).

      (iii) Bundle of documents attached to a letter of Moray & Agnew dated 31 May 2013 and a notice for production (exhibit B).

      (iv) Reply.

      (v) Applications to admit late documents of the respondent (Late application) dated 26 June 2013, 15 August 2013 and 27 August 2013.

      (vi) This Certificate of Determination.

9. Order that the respondent pay the applicant's costs as agreed or assessed.

10. I certify the matter is complex. I have been greatly assisted by the submissions of both parties in this very long and complicated matter and I order uplift of 30 per cent (both parties)."

12. In an appeal filed on Monday 2, June 2014, the appellant has challenged the Arbitrator's determination.

PRELIMINARY MATTERS

Is the appeal within time?

13. Appeals to a Presidential member under s 352 of the *Workplace Injury Management and Workers Compensation Act* 1998 (the 1998 Act) must be made within 28 days of the decision appealed (s 352(4)). Ms Green's counsel, Mr McManamey, submitted that the appeal was filed out of time. Counsel for the appellant, Mr Lowe, submitted that it was filed in time and, if it is out of time, he seeks an extension of time.

14. The position in respect of calculating time in which to appeal in s 352 is as follows:

    (a) an appeal against an Arbitrator's decision must be made within 28 days "after the making of the decision appealed against" (s 352(4));

    (b) an Arbitrator's decision is made "when the Commission issues a certificate as to the determination of the dispute as required by section 294(1) of the 1998 Act" (Pt 16 r 16.2(2) of the *Workers Compensation Commission Rules* 2011 (the Rules));

    (c) in the present matter, the Commission issued a Certificate of Determination under s 294 on 2 May 2014 and time under s 352 runs from that date;

    (d) however, applying s 36(1) of the *Interpretation Act* 1987, the "given date" for the reckoning of time under s 352 is 2 May 2014 and time to appeal is calculated "exclusive of <u>that day</u>" (emphasis added);

    (e) the 28th day after 2 May 2014 (counting from and including 3 May) was Friday 30 May 2014, therefore,

    (f) as the appeal was filed on Monday 2 June 2014, it is out of time.

The Rules regarding an extension of time

15. An extension of time in which to appeal is governed by Pt 16 r 16.2(12) of the Rules, which provides:

    "(12) The Commission constituted by a Presidential member may, if a party satisfies the Presidential member, in exceptional circumstances, that to lose the right to seek leave to appeal would work demonstrable and substantial injustice, by order extend the time for making an appeal."

Submissions

16. The appellant asserts that the chronology relevant to the application to extend time is as follows:

(a) on 5 May 2014, the appellant's solicitors received the Certificate of Determination;

(b) a copy of the Certificate of Determination was sent to the insurer (no date is given for this);

(c) the appellant's solicitors sought a copy of the transcript of evidence for the purpose of considering an appeal (no date is given for this);

(d) the Commission provided the appellant's solicitors with a copy of the sound recording of the proceedings (no date is given for this);

(e) on 19 May 2014, a copy of the Certificate of Determination (and, presumably the Arbitrator's reasons) was sent to Mr Lowe along with his original brief;

(f) on 21 May 2014, CGU instructed the appellant's solicitors to seek a brief opinion from counsel as to the prospects of success of an appeal;

(g) on 25 May 2014, counsel provided an advice on the prospects of success of an appeal;

(h) on 26 May 2014, CGU provided instructions to appeal, an urgent internal transcription of the sound recording was commenced, and counsel was instructed to prepare draft submissions on appeal;

(i) the internal transcript was described as "barely adequate";

(j) well before time to appeal expired (the exact date has not been given), the appellant's solicitors and counsel looked at the question of time and, based on the authorities, concluded that time expired on 2 June 2014;

(k) late on Friday, 30 May 2014, counsel emailed draft submissions to the appellant's solicitors;

(l) on 1 June 2014, counsel emailed revised submissions to the appellant's solicitors, and

(m) on 2 June 2014, the final application to appeal and submissions in support were prepared by the appellant's solicitor and filed with the Commission.

17. Mr Lowe submitted that time to appeal should be extended because:

(a) the Certificate of Determination was not received until three days after the apparent date of its issue by the Commission;

(b) there was no lack of diligence by the appellant, or its representatives, in dealing with the matter in the 25 days that remained (after receipt of the Certificate of Determination), particularly in view of the difficulty in obtaining a transcript;

(c) the appeal is only one working day out of time;

(d) Ms Green has identified no specific prejudice and none is obviously apparent;

(e) the matter raises important issues that may be of general application in terms of proving a claim for injuries resulting from exposure to environmental tobacco smoke;

(f) the matter has the potential to result in substantial liability to the appellant, including lump sum compensation totalling $180,550 in the present claim alone;

(g) the appellant has a strongly arguable case, and

(h) to lose the right of appeal due to non-compliance with a time limit in the circumstances set out above would result in a demonstrable and substantial injustice to the appellant.

18. Mr McManamey submitted that there is no explanation for the 16-day delay between sending the Certificate of Determination to the insurer and the receipt of instructions to seek an opinion as to the prospects of success on appeal. Without this unexplained delay in giving instructions, the appeal could have been lodged within time. He added that there was no explanation why the appellant did not start transcribing the sound recording until 26 May 2014, when the transcript had been identified as necessary upon receipt of the Certificate of Determination. In the absence of any explanation for these delays, the appellant is not entitled to an exercise of discretion in its favour extending time to appeal.

19. McHugh J considered the question of extending time to appeal in *Gallo v Dawson* [1990] HCA 30; 93 ALR 479 at 480. His Honour observed that, in order to determine whether the strict application of time limits will work an injustice, it is necessary to have regard to:

(a) the history of the proceedings;

(b) the conduct of the parties;

(c) the nature of the litigation;

(d) the consequences for the parties of the grant or refusal of the application for the extension of time;

(e) the prospects of the applicant succeeding in the appeal, and

(f) upon expiry of the time for appealing, the respondent has a vested right to retain the judgment unless the application for extension of time is granted.

20. Considering Pt 16 r 16.2(11) of the Commission's 2006 Rules, which is in the same terms as the current provision, Allsop P (as his Honour then was) in *Bryce v Department of Corrective Services* [2009] NSWCA 188 (Beazley JA (as her Honour then was) and Giles JA agreeing) said, at [10]:

> "Whether or not there are exceptional circumstances and whether in those circumstances it is shown to the satisfaction of the Deputy President that demonstrable or substantial injustice would occur if leave were not granted is a composite expression in the rule to be dealt with within jurisdiction."

21. There are several unsatisfactory features about the delay in filing the appeal in the present matter. First, the delay in obtaining the Certificate of Determination (if there was a delay)

was only a few days and there is no explanation of how that delay contributed to the appeal being filed out of time.

22. Second, the delay in receipt of instructions to obtain counsel's advice is lengthy and is unexplained. That is unsatisfactory, but not determinative.

23. Third, the delay in starting to transcribe the sound recording is also unexplained. More importantly, the absence of a transcript was not an issue that should have delayed the filing of the appeal. The critical document was the Arbitrator's decision, which was served with the Certificate of Determination.

24. Moreover, as observed by Allsop P (as his Honour then was) in *Kounnas v Citywide Civil Engineering Pty Ltd* [2012] NSWCA 287 at [15] "[p]ractitioners are required to keep notes of the essentials of what occurs in court. This includes, in particular, the terms of judgments and the elements of arguments put to judicial officers". These comments apply with equal, if not more, force to proceedings in the Commission.

25. Fourth, the real reason the appeal was filed out of time was, it seems, due to a conscious decision by the appellant's legal advisers that the appeal would be in time if filed on 2 June 2014. As explained above, that decision was erroneous. Astonishingly, the same error has been repeated in the submissions filed on appeal, which have continued to assert that the appeal was filed in time.

26. These matters strongly militate against extending time to appeal.

27. On the other hand, the following factors weigh heavily in favour of extending time to appeal:

    (a) once instructed to appeal, the appellant's legal representatives acted with reasonable diligence;

    (b) the appeal is only one working day out of time;

    (c) there is no obvious prejudice to Ms Green if time to appeal is extended;

    (d) the issues raised by the case are novel and complex, and

    (e) the appeal raises issues that are arguable and, in these circumstances, to lose the right to appeal will work demonstrable and substantial injustice to the appellant, as the appellant will lose the opportunity to have the matter determined according to its substantial merits.

28. On balance, while the conduct of the appellant's legal advisers, and the insurer, was less than ideal, and would not be a model to be followed in matters of this kind in the future, I am satisfied, not without considerable hesitation, that there are exceptional circumstances that justify the extension of time to appeal.

29. I extend time to appeal until 2 June 2014.

Interlocutory

30. Though the Arbitrator made findings on injury, he made no order for the payment of compensation but merely remitted the matter to the Registrar for referral to an Approved

Medical Specialist (AMS). As the Arbitrator made no formal orders finally determining the parties' rights, the orders made are interlocutory (*Licul v Corney* [1976] HCA 6; 180 CLR 213 at 443–4) and the appellant requires leave to appeal (s 352(3A)).

31. If the appellant's arguments are accepted, Ms Green will either have no entitlement to compensation, because there will be an award for the appellant, and there will be no need for a referral to an AMS, or, in the alternative, the matter will need to be re-determined before a different Arbitrator. Either way, it is desirable for the proper and effective determination of the dispute that, before the matter proceeds further, the issues raised in the appeal be determined. I therefore grant leave to appeal.

ON THE PAPERS

32. Section 354(6) of the 1998 Act provides:

> "(6) If the Commission is satisfied that sufficient information has been supplied to it in connection with proceedings, the Commission may exercise functions under this Act without holding any conference or formal hearing."

33. Having regard to Practice Directions Nos 1 and 6, the documents that are before me, and the submissions by the parties that the appeal can proceed to be determined on the basis of these documents, I am satisfied that I have sufficient information to proceed 'on the papers' without holding any conference or formal hearing and that this is the appropriate course in the circumstances.

ISSUES IN DISPUTE

34. The issues in dispute in the appeal are whether the Arbitrator erred in:

    (a) finding that Ms Green's employment was employment to the nature of which the disease was due;

    (b) finding that Ms Green's employment was a substantial contributing factor to the contraction of the disease;

    (c) failing to determine whether, for the purposes of s 15, Ms Green's disease is a disease of gradual process or gradual onset, and failing to indicate at the arbitration that he would not determine that issue, thereby failing to afford the appellant procedural fairness, and

    (d) failing to give adequate reasons for his decision.

THE ARBITRATOR'S DECISION

35. Under "Circumstances", the Arbitrator set out Ms Green's work history of bar work in the registered club and hotel industry as follows, at [6]:

> "(a) Maitland Leagues Club between 1975 and 1978;
>
> (b) George and Dragon Tavern between 1978 and 1980;
>
> (c) Yamba Bowling Club between 1982 to 1988;

(d) Lawrence Tavern between 1989 and 1995; and

(e) MacLean [sic] & District Bowling Club Co Op Ltd from December 1996 to the cessation of her employment on 18 February 2002."

36. The Arbitrator then made the following observations about Ms Green's smoking history:

> "7. [Ms Green] was a cigarette smoker and it seems that she commenced smoking from at least the age of 18 years and ceased smoking at the end of 1991 at the age of 33 (see report of 18 November 1991 of Dr Ian F McCombie, psychologist in the [appellant's] Application to Admit Late Documents of 15 August 2013, p.115).
>
> 8. The 1999 history of Dr AJ Hulcome, ear, nose and throat surgeon (see report dated 25 February 1999 p.128) is that she ceased smoking 'nine years ago' (which more correctly should be seven years ago in 1992) 'and at that stage she was smoking 50 per day'.
>
> 9. The report of Dr P Laird, physician, in his report of 2002 (see Application to Admit Late Documents of the [appellant] dated 27 August 2013, p. 8), records that 'she smoked from age 14 to 32 some 50 cigarettes per day'.
>
> 10. [Ms Green] in her statement in these proceedings says that she smoked 10 cigarettes per day. It would appear to me that the histories from the doctors' notes and reports is more likely to be accurate but I do not need to decide the precise dosage of her cigarette smoking.
>
> 11. The exposure to cigarette smoke from her personal consumption was over a period of 17 years and her exposure to passive smoking in the employment was for a period of 26 years (excluding the periods when she did not apparently work). It could be she smoked for some 21 years if she commenced smoking at the age of 14."

37. Under "Discussion", the Arbitrator said (at [12]) that there was "general agreement among all the doctors in this case that inhalation from cigarette smoking can cause lung cancer". He then referred to various provisions in the legislation and to several authorities on disease cases.

38. The Arbitrator said (at [25]) that the s 74 notice had not disputed that lung cancer is a disease and he did not think it appropriate, in the absence of a formal application, to allow it to be raised. He added (at [26]) that there was no dispute that the disease was one of gradual onset or of gradual process. This issue is the subject of a separate ground of appeal and is discussed further below.

39. He then said, at [27]–[28]:

> "27. A great deal of effort was incurred by the present [appellant] in seeking to establish that the employment with it was not employment to the nature [of] which the disease is due. I accept however the evidence of the applicant and Ms Reyse-Eyles [sic] that there was regularly blue smoke from cigarettes visible in the clubhouse. I note the various efforts carried out by the [appellant] to remove cigarette smoke in the club house [sic]. I further accept that all of the

employments to which I have already referred in the club and liquor industry have been employments to which the nature of the disease of lung cancer is due.

28. It matters not that [Ms Green's] exposure in the [appellant's] employment may not have in any way caused, aggravated or accelerated the process provided that her employment was of the class of employment to which the disease is due. The [appellant], being the last employer in that category, is potentially liable under s 15."

40. The Arbitrator then turned (at [29]) to the matter that caused him "greater difficulty", namely, what he called the "defence raised by s 9A" (whether employment was a substantial contributing factor to the injury). He said that the words "employment concerned" in s 9A(1) related to "the class of employment not merely the last employment of the relevant type".

41. The Arbitrator said that he had particular regard to the submission by Mr Lowe that the fact of exposure from Ms Green's cigarette smoking substantially outweighed the contribution made by environmental tobacco smoke, which seemed to be the view of all the doctors.

42. The Arbitrator referred to evidence from Professor Tattersall, Fellow of the Royal Australasian College of Physicians, qualified by the appellant, who said that (Ms Green's) cigarette smoking "dwarf[ed] any contribution from environmental tobacco smoke" and that, based on research by R Peto, *Influence of Dose and Duration of Smoking on Lung Cancer Rates*, IARC Scientific Publication, 1986, 74:23-33 (Peto), "lung cancer risks depend far more strongly on the duration than the daily dose rate of cigarette smoking" ([34]).

43. The Arbitrator concluded, at [36]–[38]:

"36. However, in view of the conclusions expressed by Peto, as set forth in Dr Tattersall's report, as to duration of exposure rather than dosage as being more significant, it seems to me that the further 10 years of environmental tobacco smoke exposure is a 'strand in the cable', to use the expression referred to in the various decisions, given the occurrence of lung cancer, which leads me to the inference, on the balance of probabilities, that the environmental tobacco smoking exposure substantially contributed to the contraction of [Ms Green's] lung cancer and that this contribution was real and of substance, even if the comparative contribution of cigarette smoking is significantly greater in dosage.

37. I find that [Ms Green] satisfies, on the balance of probabilities, the requirements of the definition of injury within the meaning of s 4(b)(i) of the Act, namely that the worker contracted the disease of lung cancer in the course of her employment in the hotel and club industry and that employment was a contributing factor to the contraction of the disease, even if cigarette smoking was also a major contributing factor to the contraction of that disease.

38. I further find that:

(a) The disease is one of gradual process.

(b) Her employment in the liquor and gaming industry over 25 years by reason of the exposure to environmental tobacco smoke in such employment (up to January 2002) has been one to the nature [of] which the disease is due.

(c) The exposure to environmental tobacco smoke in such employment is a substantial contributing factor to the injury.

(d) The employment with the respondent is one to the nature [of] which the disease is due.

(e) The injury in question occurred on the date of the relevant claim for s. 66 lump sum compensation, namely, 24 April 2012. (*Stone v Stannard Brothers Launch Services Pty Ltd* [2004] 1 DDCR 70) and that the defences under s 254 and 261 of the 1998 Act fail: (*Gow v Patrick Stevedores No. 2 Pty Ltd* (2002) 24 NSWCCR 626).

(f) By reason of the operation of s 15 of the Act, the respondent is the last relevant employer and is fixed with liability [with] respect to the injury."

SUBMISSIONS

44. As the issues substantially overlap, it is appropriate to deal with them together.

The appellant's submissions

45. The appellant's solicitor, Alison Barry, argued that Ms Green had to prove that the employment in which she had been engaged with the appellant:

> "was of such a nature as to cause the disease, even though she did not have to prove that the disease in fact resulted from her employment with any particular employer; secondly that this burden of proof was not discharged by [Ms Green] establishing a mere possibility rather than a probability that the disease was due to the nature of the employment, and thirdly that the evidence in this case at best established a mere possibility of a causal connection between the disease and the nature of the employment."

46. Ms Barry contended that, when one considers the evidence bearing on the point, the Arbitrator's reasons were inadequate and "clearly wrong".

47. Though it may have been open to the Arbitrator to prefer the lay evidence of the witnesses nominated as to the presence and appearance of tobacco smoke in the premises in which Ms Green was employed at certain times, Ms Barry contended that it was not open to the Arbitrator to "jump from such a factual finding based on lay observations to the conclusion he reached without expert evidence supporting the finding that the employment was employment to the nature of which lung cancer is due". Ms Barry contended that there was no expert evidence supporting the latter finding.

48. Ms Barry submitted that the evidence from the treating cardiothoracic surgeon, Dr Ford, did not satisfy the requirements for expert evidence and, as a mere ipse dixit, could be put to one side. None of the experts' reports, it was submitted, contain any evidence about the aetiology of the disease or any opinions specific to whether the employment was employment to the nature of which lung cancer is due, whether as to Ms Green's overall employment in the hotel or club industry or with the appellant.

49. It was contended that the opinions in the evidence tendered were "founded upon statistical studies of persons whose smoking history does not match [Ms Green's] and whose exposure

to environmental tobacco smoke cannot be said to have matched [Ms Green's]", in terms of dose and duration, but from which estimates are made of stated increased or excess risk based on no studies of Australian conditions or of Australian hotel or club employment during Ms Green's exposure.

50. Ms Barry said that the absence of evidence was made clear by the evidence from Associate Professor Bryant, Fellow of the Royal Australasian College of Physicians, qualified by Ms Green's solicitors, who said that the solicitors would need to contact an experienced epidemiologist to provide them with actual levels of risk for all of the periods of environmental tobacco smoke exposure and provide an estimate of the degree of risk of Ms Green developing a lung cancer as a consequence of it as opposed to her own cigarette smoking. No such evidence was tendered.

51. It was submitted that the evidence about the duration and extent of Ms Green's employment exposure to environmental tobacco smoke during any of her hotel and club employment, including with the appellant, was both sparse and vague, with no specificity as to the duration of the exposure or likely dose, and without the "foundational epidemiological evidence specific to Ms Green's circumstances".

52. In these circumstances, it was contended that there was no sound evidentiary basis for determining the exposure to risk involved in Ms Green's employment and no basis for determining that Ms Green's employment was employment to the nature of which the disease is due.

53. On the substantial contributing factor issue, Ms Barry submitted that the evidence did not "explicitly establish" that the contribution of Ms Green's employment to the contraction of the disease of lung cancer was real and of substance and did not provide any basis from which the Arbitrator could infer such a conclusion. Professor Tattersall's evidence confirms that Associate Professor Bryant's opinion is limited by the absence of the epidemiological evidence that Associate Professor Bryant suggested be obtained. The result is that Associate Professor Bryant's opinion involves no more than a discussion of generalities, including different assessments by various researchers and analysis of the excess risk involved in exposure to environmental tobacco smoke in various circumstances and locations.

54. Hence, so it was argued, in the absence of epidemiological evidence, the utility of Associate Professor Bryant's evidence is "limited" and there is no other evidence that "fills this evidentiary lacunae". It cannot be said that Ms Green's employments in the hotel or club industry gave rise to an identifiable or quantifiable excess or additional risk factor and it cannot be said that her employment exposure to environmental tobacco smoke was a contributing factor to the contraction of the lung cancer, let alone a contributing factor that was "real and of substance".

55. On the issue of whether the Arbitrator failed to determine whether lung cancer is a disease of gradual process, Ms Barry submitted that, at the outset of the arbitration, the Arbitrator noted this to be an issue (T2.1). She contended that, contrary to Mr McManamey's submissions in reply at the arbitration, this issue had been raised in the s 74 notice and the Arbitrator erred in failing to deal with it.

56. Ms Barry further contends that the Arbitrator failed to accord the appellant procedural fairness in that, having accepted Mr McManamey's submissions in reply (that the s 74 notice did not dispute that lung cancer is a disease contracted by a gradual process), he failed to draw Mr Lowe's attention to his intention not to determine that issue on the evidence and

deprived the appellant of the opportunity to be heard on the question of how the issue should be dealt with.

57. Ms Barry submitted that, on the evidence, the issue of whether or not Ms Green has suffered a disease of gradual process cannot be affirmatively answered because there is no evidence "about the aetiology of [Ms Green's] disease". The evidence is "limited to evidence about the statistical coincidence between environmental tobacco smoke exposure and the incidence of lung cancer from non-Australian studies of exposure in uncertain circumstances, in persons with actual smoking histories that differ from that of [Ms Green]". Ms Barry again referred to the absence of epidemiological evidence.

58. Dealing with the alleged failure to give reasons, Ms Barry submitted that the Arbitrator did not "engage with or grapple or wrestle with the case presented by the appellant and did not relate the relevant evidence to the findings" made. He failed to engage with the competing expert evidence, after first analysing the factual evidence available to support that evidence.

Ms Green's submissions

59. Mr McManamey submitted that Associate Professor Bryant had commented that there was a vast body of evidence supporting a causal association between the inhalation of tobacco smoke and the risk of developing lung cancer. He said that research showed that there appeared to be an increase in the risk of developing lung cancer of the order of 20 per cent in individuals exposed to passive smoke. He was satisfied that Ms Green's own smoking and her exposure to environmental tobacco smoke were both likely to have contributed to her increased risk of developing bronchogenic carcinoma.

60. Associate Professor Bryant's suggestion that it would be necessary to contact an experienced epidemiologist, to provide evidence of the actual levels of risk, was of no significance because it only related to determining an apportionment of contribution between the environmental smoke and Ms Green's own smoking. That does not affect his clear opinion that there is an association between the environmental smoke to which Ms Green was exposed throughout her working life and her subsequent lung cancer.

61. Mr McManamey highlighted that Dr Ford, in his report of 12 October 2009, expressed the clear view that passive smoking had "contributed extensively" to the cause of Ms Green's disease. He said that that report had to be read in conjunction with Dr Ford's report of 21 January 2002, where he showed that he was aware that Ms Green had been a smoker until 12 years earlier and that she worked in a "smoke infested club".

62. Mr McManamey referred to the statement by Peto that the key to any proper understanding of tobacco carcinogenesis is the extraordinary relevance of the duration of smoking to lung cancer onset rates. People who stop smoking before they have cancer thereby avoid most of the risk of getting cancer from the habit. Ms Green ceased smoking at least 10 years before she developed lung cancer, but continued to be exposed to environmental smoke at work during that time.

63. Mr McManamey referred to another research article in evidence that asserted that stopping smoking before the age of 40 avoids more than 90 per cent of the excess mortality caused by continuing to smoke (Kirstin Pirie et al, *The 21st century hazards of smoking and benefits of stopping: a prospective study of one million women in the UK* in The Lancet, vol 381 12 January 2013 (Pirie)). This article concluded that there is a positive association between passive smoking and lung cancer, something that Professor Tattersall acknowledged.

64. Professor Tattersall also accepted that there is a 20 per cent increase in lung cancer among women who have been exposed to passive smoke. He also thought there was an additional risk of lung cancer due to passive smoking in smokers and ex-smokers, but thought it was likely to be very small. He accepted that lung cancer risk depends more strongly on duration than on the daily dose of cigarette smoking.

65. While Professor Tattersall did not think there was a causal link with passive smoking, he did not reconcile how this could be, given that Ms Green's exposure to smoke at work was for a significantly longer duration than her period as a smoker. He agreed with Associate Professor Bryant's conclusion that it was statistically more likely that Ms Green's earlier period of exposure to environmental tobacco smoke was likely to have been of greater significance to increasing her risk of developing a bronchogenic carcinoma. It is immaterial that he thought that any contribution from cigarette smoking was far greater.

66. As to the meaning of the term "employment to the nature of which the disease was due", Mr McManamey referred to the authorities of *Smith v Mann* [1932] AC 30; 47 CLR 426 and *Tame v Commonwealth Collieries Pty Ltd* (1947) 47 SR (NSW) 269 (*Tame*) and submitted that what is significant is that it is sufficient that the employment involves a risk of developing the disease.

67. The Arbitrator had before him evidence that there is an association between the inhalation of tobacco smoke and the development of lung cancer. He accepted the evidence of Ms Green and Ms Rose-Eyles (a former work colleague) that there was regularly blue smoke from cigarettes visible in the clubhouse. When that factual finding is added to the expert evidence, the conclusion that employment with the appellant was employment to the nature of which the disease was due was available and correct.

68. Dealing with whether Ms Green's employment was a substantial contributing factor to the contraction of the disease, Mr McManamey relied on the Arbitrator's conclusion that, as the duration of exposure was more significant, the further 10 years of environmental tobacco smoke exposure led to the inference, on the probabilities, that the environmental tobacco smoke exposure substantially contributed to the contraction of Ms Green's lung cancer and that that contribution was real and of substance.

69. Mr McManamey added that the Arbitrator's conclusion was consistent with the opinion of Dr Ford and, in any event, Ms Green was entitled to succeed on the evidence from Professor Tattersall, who accepted that her environmental tobacco smoke had contributed to the development of the lung cancer but thought that her own smoking was a much greater contribution.

70. On the issue of whether the Arbitrator gave adequate reasons, Mr McManamey submitted that the Arbitrator's reasons are clear and that he explained how he reached his conclusion. He accepted the evidence from Ms Green and Ms Rose-Eyles, as to the presence of smoke from cigarettes while working in the clubhouse, and he considered each of the issues and explained how the evidence led him to the conclusions he reached.

71. In submissions in reply, Mr Lowe observed that neither of the articles upon which Mr McManamey relied (Peto and Pirie) dealt with the effects of environmental tobacco smoke as opposed to the effects of smoking. Professor Tattersall referred to and discussed the significance of duration of exposure to cigarette smoke caused by smoking rather than the duration of her exposure to environmental tobacco smoke.

72. Even if Professor Tattersall accepts that the duration of exposure to environmental tobacco smoke may be relevant in Ms Green's case, which is contraindicated by the Professor's report, Mr Lowe reiterated the submission about the sufficiency of the expert evidence "to support the transition from the conclusions based upon statistical analysis of dissimilar overseas cases to the particular circumstances of the present case in the absence of the additional evidence that [Associate Professor] Bryant specifically said was necessary".

DISCUSSION AND FINDINGS

73. The appellant's complaints come down to two main issues: first, the allegation that the Arbitrator's decision was "clearly wrong", which is based on an assertion that there is no expert evidence to support the claim, and, second, the allegation that the Arbitrator did not give adequate reasons for his decision. It is convenient to consider first the relevant authorities, then the evidence said to support the claim and, last, the alleged failure to give reasons.

74. As explained by Meagher JA (Bathurst CJ and Hoeben JA agreeing) at [18] in *CSR Timber Products Pty Limited v Weathertex Pty Limited* [2013] NSWCA 49; 83 NSWLR 433, the following are legally indispensable in a claim under s 4(b)(i):

    (a) that the worker contracted a disease in the course of employment and to which that employment was a contributing factor (s 4(b)(i);

    (b) that the employment was a 'substantial contributing factor' to that injury (s 9A(1));

    (c) that the disease was a disease of such a nature as to be contracted by a gradual process (s 15(1));

    (d) that the worker made a claim for compensation in relation to that disease on a specific date (s 15(1)(a)(ii)), and

    (e) that the employer from who compensation is claimed was the employer who last employed the worker in employment to the nature of which that disease was due (s 15(1)(b)).

75. The law on the meaning of the phrase "employment to the nature of which the disease was due" is well established. As explained by Starke J in *Smith v Mann* (1932) 47 CLR 426 at 441:

> "it was enough if his work with his last employer was of the same nature and character as the work to which the disease was due, and that it was not necessary to prove that it was the employment with his last employer that caused the 'disablement'."

76. His Honour added, quoting (with apparent approval) from *Blatchford v Staddon & Founds* (1927) A.C. 470, that it is "enough if the disease is incidental to that class of employment so that it can be attributed to service therein".

77. To similar effect, Jordan CJ held in *Tame* at 272:

> "I think that 'employment to the nature of which the disease was due' means an employment of such a kind as to involve a risk to the employee of contracting the gradual process disease which is disabling him. In the present case, what is

complained of is a disease contracted by a gradual process of the inhalation of silica dust. For the worker to succeed, it was necessary for him to satisfy the Commission that his employment with his last employer was of such a kind as to expose him to the risk of inhaling silica dust."

78. Turning to the evidence in the present case, I do not accept that there is no expert evidence which, if properly considered, is capable of supporting the finding that Ms Green's employment with the appellant was employment to the nature of which the disease was due and that her employment (in the hotel and club industry over the years) was a substantial contributing factor to the injury. The evidence in support of the claim is found in several sources.

79. First, Associate Professor Bryant gave evidence, supported by reference to numerous scientific research papers, that there is a vast body of evidence supporting a causal association between the inhalation of tobacco smoke and the risk of developing lung cancer. The Associate Professor added, with extensive references to scientific research:

    (a) the excess lung cancer risk rises in proportion to the amount of cigarette smoke inhaled and to the duration of that exposure;

    (b) research in 1981, confirmed by research in 1994 and 1998, raised the possibility of an increased risk of lung cancer in passive smokers, and

    (c) the current evidence suggests that the magnitude of the excess risk among those exposed to passive smoking in the work place is likely to be in the order of 20 per cent.

80. Associate Professor Bryant concluded that it was "likely that [Ms Green's] own cigarette smoking and that her exposure to environmental tobacco smoke (passive smoking) are both likely to have contributed to her increased risk of developing a bronchogenic carcinoma". He added:

> "With regard to her exposure to environmental tobacco smoke (passive smoking) all of the environmental tobacco smoke that she was exposed to is likely to have made a contribution to her risk of developing bronchogenic carcinoma although, because of the short latency between her work at the McLean [sic] Bowling Club (8 years) and her development of a bronchogenic carcinoma, it is statistically more likely that her earlier periods of exposure to environmental tobacco smoke are likely to have [been] of greater significance of increasing her risk of developing a bronchogenic carcinoma. You will need to contact an experienced epidemiologist to provide you with actual levels of risk for all of the periods of environmental tobacco smoke exposure and to provide you with an estimate of the degree of risk of her developing a lung cancer as a consequence of environmental tobacco smoke as opposed to her own cigarette smoking."

81. This opinion was based on Associate Professor Bryant's history of Ms Green having worked in the bar and club industry from the age of 18 until she stopped in January 2002, and on relevant research linking passive smoking to lung cancer. He recorded that all of Ms Green's periods of work were similar "in terms of her exposure to cigarette smoke", though she believed "the amount of cigarettes smoked" at the appellant's club was probably the strongest because there was an extractor fan immediately behind the bar area so that all the smoke in the premises was drawn into that area. (I have assumed that the reference to "the

amount of cigarettes smoked" was a reference to the amount of environmental tobacco smoke to which Ms Green was exposed at the Club. This follows from the context of the statement and other evidence as to when Ms Green stopped smoking.)

82. Ms Green told Associate Professor Bryant that she worked an 8–10 hour day, the number of people in the bar varied from 10 to some dozens and at least 50 per cent of these people smoked. She added that, when there were larger numbers of people smoking, a blue haze was clearly visible in the air. Apart from the history of the number of hours worked per day, which was probably not accurate (though I doubt that anything turns on this error), the rest of Ms Green's history to Associate Professor Bryant is corroborated by other lay evidence.

83. The absence of the epidemiological evidence that Associate Professor Bryant suggested be obtained, and upon which Ms Barry placed considerable weight on appeal, is of limited relevance. While such evidence may well have assisted in resolving the issues in dispute, its absence did not mean that Ms Green had to fail, or that Associate Professor Bryant's evidence was no more than "a discussion of generalities". His evidence provided some support for the claim, which had to be assessed and weighed against the other evidence in the case, especially Professor Tattersall's evidence. As explained below, the Arbitrator did not do that.

84. The epidemiological evidence referred to by Associate Professor Bryant would have addressed the risk of Ms Green developing lung cancer as a consequence of environmental tobacco smoke compared to the risk due to her smoking. Evidence of the comparative risk of different causes would not necessarily be determinative. That is because, for Ms Green to succeed, it is not necessary for her to prove that her employment (in the hotel and club industry overall) was the substantial contributing factor to her injury. She only has to prove that her employment was a substantial contributing factor to her injury. It does not matter that her smoking may have played a greater role in the development of her condition compared to the role played by the environmental tobacco smoke to which she was exposed at work.

85. Second, the submission that the evidence from Dr Ford can be put to one side, because it was a mere ipse dixit, was not accurate. Even in evidence based jurisdictions, compliance with the usual requirements for expert evidence "does not require strict compliance with each and every feature referred to by Heydon JA in *Makita* to be set out in each and every report" (per Beazley JA (as her Honour then was) (Giles and Tobias JJA agreeing) in *Hancock v East Coast Timber Products Pty Ltd* [2011] NSWCA 11; 80 NSWLR 43 at [82] (*Hancock*)).

86. Beazley JA added (at [83]) that, in non-evidence based jurisdictions (such as the Commission), the question of "acceptability of expert evidence will not be one of admissibility but of weight". What is required for satisfactory compliance with the principles governing expert evidence is for the expert's report to set out "the facts observed, the assumed facts including those garnered from other sources such as the history provided by the appellant, and information from x-rays and other tests" ([85]). If an expert has done more than one report, those reports must be read together, and with the other evidence tendered. That is because a deficiency in one part of the expert's evidence "may be made good by other material, either in another report or in oral evidence" ([92]).

87. I assume that the submission that Dr Ford's evidence is merely an ipse dixit was reference to his report of 12 October 2009, where he said he was "sure that passive smoking has contributed extensively to the cause of [Ms Green's] disease". This report has no relevant

history of Ms Green's work history and I accept that, on its own, it is of limited probative value. However, as Beazley JA pointed out in *Hancock*, if an expert has done more than one report, those reports must be read together, because a deficiency in one may be made good by another.

88. In addition to his report of 12 October 2009, Dr Ford also reported to Dr Laird, Ms Green's treating general practitioner, on 21 January 2002, immediately after her routine chest x-ray revealed a right upper lobe shadow. He recorded in that report that Ms Green "was a smoker until 12 years ago and still works in a smoke-infested club". Clearly, the "smoke infested club" was the appellant's clubhouse. When this history is taken into account, it is open to conclude that Dr Ford's opinion in 2009 was based on the facts observed, the history he took from Ms Green in 2002, and the information from x-rays and other tests. Thus, though it would have been preferable if Dr Ford had set out his history and opinion in one medicolegal report that addressed the terms of the legislation, his evidence (extracted from his two reports) complied with the requirements for expert evidence and is available be considered in the assessment of the case. The difficulty is that the Arbitrator did not refer to it.

89. Third, the relevance of the submission that the opinions in the evidence tendered were "founded upon statistical studies of persons whose smoking history does not match [Ms Green's] and whose exposure to environmental tobacco smoke cannot be said to have matched [Ms Green's]" is difficult to follow. It will be a rare case where the relevant research matches exactly the experience of the worker concerned. Such matching is not essential for the research to be relevant and probative. The weight to be attached to such evidence is another matter.

90. In the present case, Associate Professor Bryant referred to numerous research articles relevant to the issues in dispute. In particular, he referred to the article by Taylor et al, *Australian & New Zealand Journal of Public Health*, 2001, *Passive smoking and lung cancer: a cumulative meta–analysis* 25 : 203 – 2011 (Taylor). This article acknowledged that, at that time, there were no studies examining the relationship between passive smoking and lung cancer in Australia, but added, "it is logical to consider the results from studies that took place in countries with a way of life similar to that of Australia".

91. When the results of 19 studies in the US, UK and Northern, Southern and Western Europe were combined, the relative risk of lung cancer from spousal smoking for females (who did not smoke) was 1.22. This was a statistically significant result that indicated an increased risk of approximately 20 per cent for non-smoking women exposed to spousal environmental tobacco smoke, compared with unexposed non-smoking women. Taylor added:

> "There is homogeneity between studies in the Western meta-analysis ($p>0.05$), suggesting that each of the primary studies produce results consistent with each other. This result may represent the most accurate estimate of effect for Australia."

92. In the absence of evidence suggesting that this statement was inaccurate, or could not be relied on, the submission about the absence of Australian studies about the effects of environmental tobacco smoke was without merit. The Commission is therefore entitled to consider the research referred to by Taylor, and the other overseas research in the case, in assessing whether Ms Green has established her case.

93. Relevantly, Taylor continued:

> "The abundance of evidence in this paper, and the consistency of findings across domestic and workplace primary studies, dosimetric extrapolations and meta-analyses, directs the reader to only one logical conclusion: non-smokers exposed to [environmental tobacco smoke] are clearly at increased risk of lung cancer. …
>
> Workplaces and restaurants are the public venues that expose the greatest number of people to tobacco smoke. Levels of [environmental tobacco smoke] in restaurants can be 1.5 times higher than in homes with one smoker, and double those in offices. [Environmental tobacco smoke] levels in bars can be more than six times those in offices that allow smoking (US data: Siegel). A physically separated smoking area, with separate ventilation, may protect customers, but does not prevent exposure of employees to [environmental tobacco smoke]. The preferable public health policy is a total ban on smoking in public venues."

94. The Arbitrator did not refer to Taylor, or the research referred to in that article.

95. The submission that the duration and extent of Ms Green's employment exposure to environmental tobacco smoke was "sparse and vague" was incorrect and made without any proper regard to the evidence. The evidence from Ms Green was that:

    (a) during all of her various positions with her various employers she was exposed to passive smoking in the form of cigarette smoke;

    (b) at all the clubs and pubs where she worked there was some degree of cigarette smoke exposure but the greatest level of exposure occurred with the appellant;

    (c) her shifts with the appellant were for about 8–10 hours each. During that time, the number of patrons at the club varied from "just a few to dozens". When the club was busy, the smoke "could be seen in the air";

    (d) the Club's air conditioning unit was old and frequently broke down. When it was working, "it drew air from the entire poker machine lounge and bar area of the Club, directly towards the bar as the air extraction vent was located behind the bar". There was "no exhaust fan[,] so the only direction the smoke filled air could travel, was straight towards both of us working behind the bar", and

    (e) due to agitation by Ms Green's workmates regarding the issue of smoke being drawn into the bar area by the air-conditioning system, the extraction fan was removed (from the bar area) and relocated while she was in hospital having her lung removed.

96. Evidence from Ms Green's former work colleague, Ms Rose-Eyles (wrongly spelt Reyse-Eyles by the Arbitrator), who worked at the Club from 1999 to some time prior to her statement dated 13 May 2013, was that:

    (a) the bar at the Club had the large extractor fan for the whole of the bar area located inside the bar directly above where staff stood to deliver poker machine payouts, weigh coins for payouts, write up all payouts and refills and access the daily cash float;

(b) there were no direct extractor fans in the poker machine room or the bar area and the majority of patrons, at that time, smoked, particularly while playing the (poker) machines;

(c) a small window connected the bar and poker machine room, through which all the smoke from the machine room was drawn into the bar and into the extractor;

(d) it was physically impossible not to be breathing large amounts of second-hand smoke in the work environment;

(e) she was aware that complaints had been made to management regarding the location of the extractor fan by one of the bar supervisors as he suffered continually from chest infections and coughs, but no action was taken until after Ms Green had left the Club;

(f) there were several air purifiers located on the ceiling throughout the bar area that rarely worked and were infrequently serviced. One board member said "those stupid things never worked";

(g) she recalled that, on several occasions, the extractor broke down and servicing it often took several days;

(h) within 12-18 months after Ms Green left new air-conditioning units were installed, and

(i) in her years of working at the Club, prior to the smoking laws being introduced, Ms Rose-Eyles was very aware of how her uniform, hair and skin all smelled after working a shift.

97. The evidence from the appellant's secretary manager, Ian Wills, who has held that position since either September 1997 or September 1998 (his statement has conflicting dates though it appears likely the correct date is probably September 1997), was that:

(a) Ms Green worked for the appellant for an average of 23 hours per week from the time she started in 1996 until 28 November 2000 and then 27 hours per week until she stopped in January 2002;

(b) while there is an air intake grill behind the bar, it was non-functional and all used air was extracted by an intake located in the main lounge area (it is unclear if that extractor was functioning when Ms Green worked for the appellant and Mr Wills was not aware when the extractor was relocated from the bar to the main lounge);

(c) there is a bulkhead around the entire bar area that would limit the amount of smoke entering the bar;

(d) prior to the last renovation (no date is provided as to when that was), the Club "was full of windows and doors which were always open" and the air-conditioning unit only provided cooling to a portion of the building and was "only marginally useful as a cooling mechanism";

(e) towards the late 1990s, smoking became a big issue and that was when (the Club) started to react to it;

(f) from 27 July 1998, a section of the lounge area opposite the main bar was declared "smoke-free";

(g) Yamba Bowling Club (where Ms Green worked between 1982 and 1988) was a much bigger club than the appellant and there would have been a much greater likelihood of exposure to environmental tobacco smoke due to the larger number of patrons at any time;

(h) Ms Green's statement that she worked 8 to 10 hours a day was incorrect. Her hours ranged from four to eight hours per shift and the need for her to work overtime was rare;

(i) Ms Green's estimate of the number of patrons in the Club at any given time was "probably close", however, on day shifts it would be unlikely for the Club to have any more than a few people (one to six) at the start of the first two hours from 9 am until 11 am, followed by a steady increase for lunch (dozens), with a downturn in the afternoon followed by an increase towards the evening and into the night. It was difficult to estimate how many of these people were smoking at any given time, but Mr Wills estimated that the proportion of smokers to non-smokers in the Club was no different to the general ratio of smokers to non-smokers in the broader community;

(j) in September 1998, when Mr Wills started at the Club (this probably should be September 1997), smoking was restricted in many areas of the building, but was permitted in the main bar area, upstairs lounge and gaming room. The main bar was ventilated by a combination of open windows, the air-conditioning system and a "Trion" electronic air-cleaning unit in the ceiling in the front bar. The air-conditioning unit at the time was "cooling only" and could also be operated in an "exhaust only" mode whereby fresh air was drawn from outside;

(k) in September 1997, Mr Wills was aware that Ms Green was a smoker but he could not be certain how many cigarettes she smoked daily. He had the impression that her smoking habit was similar to his own, namely, casual to light. At some time during her employment, Ms Green gave up smoking and, at the time of her last shift, she was a non-smoker;

(l) from 27 July 1998, a section of the lounge area opposite the main bar was declared "smoke-free", and

(m) the Club introduced a policy to deal with passive smoking in September 2001.

98. Evidence from Josephine Campbell, the Club's pay clerk from 1992, who became head of administration in 2005, was that:

(a) Ms Green primarily worked in the main bar;

(b) there were several extractor fans "around the place", including two in the roof above the main bar, but she was not sure if they were extractor fans or "big draw fans";

(c) she strongly denied that smoke haze was ever visible in the Club, stating that it was too "open and wide an area for there to be a haze";

(d) the Club definitely had adequate exhaust equipment and ventilation. The Club had two air humidifiers (water moisturisers) around the main bar;

(e) when the Club was extended (no date given) the Club got bigger and better air conditioning fitted (the vents of which were cleaned regularly) and the air humidifiers were removed;

(f) after the extension, most of the cigarette smoke would go up to the TAB lounge and windows in that area were always open to allow for natural ventilation. In all areas, the Club had windows and doors open to allow air to come through, and

(g) Ms Green smoked when she started with the Club.

99. John Deale has been the Club's bar manager from 1997 until the time of the arbitration. His evidence was that:

(a) he saw Ms Green whenever she was on duty, three or four days a week;

(b) there was one extractor fan in the roof at the end of the bar near the TAB and Keno area. There were other "units and that [sic] on the roof but they were not working". They were a different concept, a different type of extractor unit and were pretty old;

(c) in 2002 or 2003, Mr Wills had a company remove the extractor fan and adjust the air-conditioning system;

(d) Ms Green would work eight hours a day but he did not know about her working 10 hours. She may have worked overtime during some busy periods;

(e) he estimated that the number of people in the bar during Ms Green's employment was around 10 to 15, but they would be scattered around that area. If you included the poker machine area, the number was probably 25;

(f) he could confirm that the Club has a "strong population of smokers". He has worked in numerous clubs and the appellant's was "one of the worst for smokers and percentage of smokers in this district". He confirmed that "you could see a blue haze in the air and [his] wife would say, '[m]ust have had a lot of smokers today' because she could smell the smoke on [his] clothes when [he] came home";

(g) Ian [Wells] looked at (the issue of cigarette smoke) seriously, especially after the new laws came in, to get rid of any problems they had, and

(h) being an older building, there was not adequate exhaust equipment or ventilation until the Club did the extension, which was about 2007 or 2008. His recollection was that there was "not much more natural ventilation then [sic] there is now". There were probably another four or five open doors on the wall adjacent to the bar (which were largely removed), but he did not think there were windows in there. There were some windows in the top TAB and Keno area also;

100. Alan Northam, the owner of the company that maintained the Club's air-conditioning system, gave evidence that the new system was installed in about 2007.

101. Thus, there is an abundance of evidence that, if accepted, establishes that Ms Green was exposed to environmental tobacco smoke in the course of her employment with the Club, including corroborative evidence from the Club's bar manager that, as alleged by Ms Green, you could see a blue haze in the air. The submission that the duration and extent of Ms Green's employment exposure to environmental tobacco smoke was "sparse and vague" failed to consider the above evidence and was surprising, to say the least. However, apart from the fleeting reference to "blue smoke" at [27] (see [39] above) (which was inaccurate in any event because the evidence referred to "blue haze") the Arbitrator did not deal with the lay evidence in any meaningful way.

102. In addition, contrary to Ms Barry's submissions, there is expert evidence that, if accepted, supports a finding that Ms Green's employment with the appellant, which undoubtedly exposed her to significant quantities of environmental tobacco smoke for several days per week over several years, was employment to the nature of which the disease of lung cancer is due and from which it could be inferred that her employment was a substantial contributing factor to her injury. That is so without the epidemiological evidence referred to by Associate Professor Bryant.

103. In cases of this kind, it is instructive to bear in mind the following observations by Spigelman CJ in *Seltsam Pty Ltd v McGuiness* [2000] NSWCA 29; 19 NSWCCR 385; 49 NSWLR 262 (*McGuiness*) dealing with the principles of causation and the relevance of epidemiological studies. The Chief Justice's observations were conveniently summarised (in a workers' compensation appeal) by Einstein J in *Murray v Shillingsworth* [2006] NSWCA 367 at [30]; [2006] 4 DDCR 313, at [30]:

> "i. There are cases in which medical science cannot identify the biological or pathological mechanisms by which disease develops. In some cases medical science cannot determine the existence of a causal relationship. Such a state of affairs is not necessarily determinative of the existence or non-existence of a causal relationship for purposes of attributing legal responsibility...In circumstances where the aetiology of a disease is uncertain, or subject to significant scientific dispute, the courts are not thereby disenabled for making decisions as to causation on the balance of probabilities. [at 93–94]
>
> ii. When assessing expert evidence on causation, the legal concept of causation requires the court to approach the matter in a distinctively different manner from that which may be appropriate in either philosophy or science, including the science of epidemiology. [at 142]
>
> iii. The commonsense approach to causation at common law is quite different from a scientist's approach to causation...an inference of causation for purposes of the tort of negligence may well be drawn when a scientist, including an epidemiologist, would not draw such an inference. [at 143]"

104. It is correct that there is no epidemiological evidence specific to Ms Green's circumstances. However, as noted earlier, and as the authorities demonstrate, such evidence is not essential before a finding of causation can be made on the balance of probabilities. I reject the submission that, in the absence of epidemiological evidence, the utility of Associate Professor Bryant's evidence is "limited" and that there is a "lacunae" in the evidence. This submission has ignored the other evidence in the case and ignored the fact that the commonsense approach to causation is different from a scientist's approach.

105. It follows that the submission that there was no sound evidentiary basis for determining that Ms Green's employment was employment to the nature of which the disease of lung cancer was due, and no evidence from which to conclude that her employment was a substantial contributing factor to the injury, is without foundation. There is evidence on the causation issue, including evidence from which to infer that Ms Green's employment over many years in the hotel and club industry was a substantial contributing factor to the injury.

106. However, the difficulty is that, as the appellant has complained, the Arbitrator did not deal with the appellant's case and failed to engage with the competing expert evidence, after first analysing the factual evidence. In other words, the Arbitrator did not analyse the issues and did not consider the majority of the evidence. For example, he made no relevant reference to the evidence from Associate Professor Bryant and no reference at all to the evidence from Pirie, Taylor or Dr Ford.

107. Dealing with whether employment with the appellant was employment to the nature of which the disease of lung cancer was due, the Arbitrator merely said that:

    (a) he accepted the evidence from Ms Green and Ms Rose-Eyles that there was regularly blue smoke from cigarettes visible in the clubhouse (though that was an inaccurate summary of their evidence, nothing turns on that inaccuracy);

    (b) he accepted that all of Ms Green's employments in the club and liquor industry had been employments to which the nature of the disease of lung cancer is due, and

    (c) it did not matter that Ms Green's exposure in the appellant's employment may not have caused, aggravated or accelerated the process, provided her employment was of the class of employment to which the disease is due. The appellant, being the last employment in that category, was potentially liable under s 15.

108. Rather than considering the expert and lay evidence, and determining which he accepted and which he rejected, the Arbitrator merely expressed a conclusion, namely, that he accepted that all of Ms Green's employments in the club and liquor industry had been employments to which the nature of the disease of lung cancer is due. That did not engage with the evidence and did not determine the issues in dispute. That was an error in the process of fact finding because it involved a failure to examine all of the material relevant to the issue (Hayne J (McHugh and Gummow JJ agreeing) in *Waterways Authority v Fitzgibbon* [2005] HCA 57; 79 ALJR 1816 at [130]).

109. While it is correct that an arbitrator does not have to refer to all the evidence (*Mifsud v Campbell* (1991) 21 NSWLR 725 Samuels JA at 728D), he or she should refer to the relevant evidence (*Beale v Government Insurance Office of NSW* (1997) 48 NSWLR 430 Meagher JA at 443). A trial judge (and, I would add, an arbitrator) is required to engage with the issues canvassed and to explain why one expert is accepted over the other (*Taupau v HVAC Constructions (Queensland) Pty Limited* [2012] NSWCA 293 per Beasley JA at [133] (Basten JA and Macfarlan JA agreeing), citing *Archibald v Byron Shire Council* [2003] NSWCA 292; 129 LGERA 311 at [54] per Sheller JA). The Arbitrator did not do that.

110. Similar comments apply to the Arbitrator's "analysis" of the substantial contributing factor issue. His "reasoning" essentially came down to his statement at [36], which is reproduced

in full at [43] above. After saying that he had particular regard to Mr Lowe's submission that Ms Green's cigarette smoking substantially outweighed the contribution made by environmental tobacco smoke, and noting Professor Tattersall's evidence that Ms Green's cigarette smoking "dwarf[ed] any contribution from environmental tobacco smoke", the Arbitrator concluded that Ms Green's "further 10 years of environmental tobacco smoke exposure is a 'strand in the cable'" that, given the occurrence of lung cancer, led him to the inference that:

> "environmental tobacco smoking exposure substantially contributed to the contraction of [Ms Green's] lung cancer and that this contribution was real and of substance, even if the comparative contribution of cigarette smoking is significantly greater in dosage."

111. The reference to a "strand in the cable" was, presumably, a reference to the statement by Spigelman CJ in *McGuiness* at [91] that "[c]ausation, like any other fact can be established by a process of inference which combines primary facts like 'strands in a cable' rather than 'links in a chain', to use Wigmore's simile. (*Wigmore on Evidence* (3rd ed) para 2497, referred to in *Shepherd v R* [1990] HCA 56; (1990) 170 CLR 573 at 579)".

112. However, the Arbitrator's statement came after he said he had "particular regard" to a submission (and evidence) that supported a contrary conclusion. Moreover, the Arbitrator appears to have equated Ms Green's additional exposure to environmental tobacco smoke with Peto's evidence that "lung cancer risks depend far more strongly on the duration than the daily dose rate of cigarette smoking". In taking that approach, the Arbitrator erroneously failed to acknowledge that Peto was talking about the significance of duration of exposure to cigarette smoke from smoking, not cigarette smoke from passive smoke.

113. It may well be that there are many reasons that, on a proper analysis of the evidence, justify the conclusions the Arbitrator reached. In other words, as Mr McManamey's submissions have highlighted, there may be many "strands in the cable" that justify a positive conclusion on the causation issue in this case. However, the Arbitrator referred to none of them.

114. It follows that the decision cannot stand. That does not mean, however, that there must be an award for the appellant. Without expressing a view on it, the above summary of the evidence demonstrates that there is evidence, which, properly considered, may well support a conclusion in favour of Ms Green. The parties have not invited me to re-determine the matter, each being so convinced of the correctness of their respective positions they did not appear to contemplate the possibility that the matter would need to be re-determined. As a result, the matter will have to be remitted to a different Arbitrator for re-determination.

115. Since the matter must be re-determined in any event, it is not strictly necessary for me to determine the third ground of appeal, which relates to the Arbitrator's failure to determine whether the disease of lung cancer is a disease of gradual onset. However, in view of Ms Barry's submissions, I make the following observations.

116. First, the Arbitrator expressly noted, both at the arbitration and in his decision, that there was an issue as to whether lung cancer is a disease of gradual process for the purposes of s 15 (that is, whether lung cancer is a disease which is of such a nature as to be contracted by a gradual process). Mr McManamey submitted, both at the arbitration and on appeal, that that issue had not been raised in the s 74 notice and the appellant is not entitled to rely on it.

117. Mr Lowe did not concede that to be so, though he made no submissions at the arbitration about the content of the s 74 notice. This meant that, at the least, the Arbitrator had to

determine whether the issue had been raised in the s 74 notice. Without giving any reasons, or even referring to the content of the s 74 notice, he said that it had not. That was an error that requires this issue to be re-determined.

118. Second, it is difficult to see how Mr Lowe was denied procedural fairness. He had every opportunity to respond to Mr McManamey's submissions about the s 74 notice, but did not do so. The Arbitrator was not required to give a running commentary of his views about the issues (*SZBEL v Minister for Immigration and Multicultural and Indigenous Affairs* [2006] HCA 63; 228 CLR 152 per Gleeson CJ, Kirby, Hayne, Callinan and Heydon JJ at [48]). The submission that the appellant was denied procedural fairness was without substance.

119. Third, the submission Mr Lowe made at the arbitration was that there was "no foundational evidence for, that would permit a finding that lung, in these proceedings that lung cancer is a disease which is of such a nature as to be contracted by a gradual process" (T26.1). Without deciding it, given the material attached to Professor Tattersall's report, it is difficult to see how lung cancer could be described as anything other than a disease that comes within s 15(1). As Mr McManamey submitted on appeal, the extensive research attached to Professor Tattersall's report repeatedly refers to the development of lung cancer over periods of exposure to cigarette smoke in terms of time and dosage. I would have thought that they are the classic features of a disease contracted by a gradual process. Nevertheless, this is a matter to be determined by the next Arbitrator, based on the evidence tendered. It would be a simple matter to have an expert provide an opinion on this issue, if it is seriously in dispute.

120. Fourth, the submission that whether Ms Green has suffered a disease of gradual onset cannot be affirmatively answered because there is no evidence "about the aetiology of [Ms Green's] disease" confuses the nature of the disease, on the one hand, with its cause, on the other. There is no doubt that smoking causes lung cancer. There is also no doubt that lung cancer is a disease (though it seems the appellant wishes to dispute that it is a disease of such a nature as to be contracted by a gradual process). The issue in this case is whether prolonged exposure to environmental tobacco smoke in the club and hotel industry was a substantial contributing factor to the contraction of the disease of lung cancer. That is a different issue to whether lung cancer is a disease within s 15(1).

121. Fifth, though the interpretation of the s 74 notice will be a matter for the next Arbitrator, I note that, after stating that liability was declined on the basis of ss 4, 9A, 15 and 16 of the 1987 Act, and that Ms Green had not suffered an injury "during the course of" her employment with the Club pursuant to s 4, and that her employment was not a substantial contributing factor to her lung cancer, the s 74 notice stated, among other things:

> "You have not suffered injury by way of a disease of gradual process pursuant to Section 15 of the Workers Compensation Act 1987 during the course of your employment with Maclean Bowling Club."

122. Without deciding it, this statement does not suggest that lung cancer is not a disease contracted by a gradual process. Rather, it denies that Ms Green suffered an injury by way of a disease of gradual process during the course of her employment. After then disputing other matters, which are not in issue on the appeal, the notice then embarked on an analysis of the evidence from Dr Ford and Associate Professor Bryant. It was stated, for example, that Dr Ford "made no comment about the causation of your lung cancer" and therefore had no probative value. None of the "reasons" in the s 74 notice dealt with whether lung cancer is a disease contracted by a gradual process.

123. It will be for the next Arbitrator to determine the matters properly in dispute and the consequences that flow from that. These should be addressed at a teleconference before the matter is listed for arbitration.

CONCLUSION

124. The appeal has succeeded on the ground that the Arbitrator failed to give any adequate reasons for his decision, and failed to properly consider the evidence and issues in dispute. However, many of the appellant's submissions were without merit and were made without any regard to the evidence or the authorities.

DECISION

125. I make the following orders:

    (a) the name of the appellant employer is amended to be Maclean and District Bowling Club Co-operative Ltd;

    (b) time to appeal is extended until 2 June 2014;

    (c) leave to appeal is granted;

    (d) the Arbitrator's determination of 2 May 2014 is revoked and the matter is remitted to a different Arbitrator for re-determination, and

    (e) costs of the first arbitration, and of the second arbitration, are to follow the outcome of the second arbitration.

COSTS

126. Though the appeal has succeeded, in view of the way the appeal was conducted, and noting that the appeal was filed out of time, which required additional submissions by Ms Green's counsel, it is appropriate that the appellant employer pay two thirds of the respondent worker's costs of the appeal. That two-thirds proportion is assessed at $1,685 plus GST.

Bill Roche
Deputy President

14 August 2014

I, JACQUELINE HAGGER, CERTIFY THAT THIS IS A TRUE AND ACCURATE RECORD OF THE REASONS FOR DECISION OF BILL ROCHE, DEPUTY PRESIDENT OF THE WORKERS COMPENSATION COMMISSION.

ASSOCIATE