

**NATIONAL FORENSIC ACCOUNTING CONFERENCE 2005**

**24-25 FEBRUARY 2005**

**KEYNOTE ADDRESS  
EXPERT EVIDENCE - THE EXPERIENCE OF THE LAND AND  
ENVIRONMENT COURT**

**The Honourable Justice Peter McClellan  
Chief Judge  
Land and Environment Court**

It is now twenty years since the Maralinga Royal Commission into British Nuclear Tests in Australia. I was fortunate to be given the task of counsel assisting the Commission.

One important body of evidence which the Commission received was the accounts by hundreds of service personnel of their experiences at the bomb test sites. There were so many that I could not interview them all myself and the solicitors to the Commission were sent out to collect their statements. Many of these statements were tendered without the witness being called to give oral evidence, although, if the witness asked to be able to talk to the Commission, that request was granted.

Most gave evidence about proximity to an explosion or the tasks they were required to do to check or clean equipment. Many expressed a belief that the illness which they had contracted was caused by exposure to nuclear radiation.

One sultry afternoon in Brisbane oral evidence was taken from a number of people. Mixed up with the routine evidence, I called a man who emerged from the many

people in the public gallery wearing an Hawaiian shirt, dark sunglasses and carrying a plastic bag with some rocks in it. Although the solicitors had already interviewed him I had not previously seen him and had to take his evidence "cold." To say the least, his appearance was odd. After being sworn, he sat down and carefully arranged the rocks in the plastic bag, but did not remove the sunglasses.

The witness said that he had been stationed by the army at Maralinga as a driver. One afternoon his superior had told him to go and get his truck and take it over to stores where it would be loaded with bombs. He was to take the bombs out into the dessert to an identified location where he would be met by an earthmoving machine which would dig a hole for him. He was then to set fire to the bombs. When they had finished burning, the grader would cover the remains.

You can imagine my disquiet. Not only was the courtroom full with at least one hundred people, many Australian and British media organisations were present to report our doings. My concerns that perhaps my staff were playing a joke on me heightened as the witness continued.

He recounted that he did as asked and loaded his Bedford truck with A bombs and then drove off into the dessert to the designated location. There to his amazement, "out of nowhere" over the horizon, an earthmoving machine arrived and proceeded to create a hole. They then off-loaded the bombs and, although using newspaper and matches, he could not get the "damn things" to burn.

Concerned that he had failed, the soldier went back to base and confessed to his commander that although everything else had been fine the bombs would not burn. "You dope", the officer replied "didn't you know you needed water. Out the back of the shed there are some beer bottles - go and fill them up and then go back and throw them at the bombs and you'll be right."

The former soldier solemnly recounted how he retrieved the beer bottles, filled them with water and headed back into the desert. The earthmoving man was still there. Together they threw the beer bottles at the bombs which smashed on contact causing a significant conflagration. The hole was filled in and the man returned to normal duties. He told us that he had been troubled ever since about the consequences for his health from these activities but, sworn to secrecy, had not told anyone about them.

Well, as you can imagine, the reaction to the story was one of amused incredulity. The Brisbane Courier Mail, known, of course, for its restrained reporting, went to town filling the complete afternoon front page with the headline "I threw bottles at the A Bomb" followed by a detailed account of the story.

On the previous day Jim McClelland had delivered one of his verbal assaults on the British Government for withholding information from the Commission. During his acerbic speech he included comments on the matrimonial difficulties of Henry VIII. It led to the celebrated Moir cartoon with Queen Victoria progressing into court to tick him off for his impertinence. Not only were we in hot water with the monarchists, we now appeared to be encouraging elements of grand farce.

I shall return to the man with the rocks later.

Shortly after my appointment to the Supreme Court I was asked to preside at the trial of a case where the plaintiff alleged that tobacco smoke in the workplace had caused her cancer: *Sharp v Port Kembla Hotel & Port Kembla RSL Club*, 19 March 2001, NSWSC. The case was decided with a jury which was required to determine whether to accept the evidence of experts called by the plaintiff or the defendant. The issue was whether the plaintiff's cancer of the larynx had been caused by her exposure to tobacco smoke during her employment as a bar attendant in a club - a complex scientific issue.

Both the plaintiff and the defendant called doctors of undoubted qualifications and experience. The witnesses called by the plaintiff were all Australian which, I suspect, although, of course, one will never know, was a significant factor in the outcome of the trial. The defendant called some Australian witnesses and two American scientists. The Americans were professors from eminent universities with considerable experience in relation to issues of smoking and cancer. Some of the defendant's witnesses were prepared to accept that at some future stage the research may show a link between "passive" smoking and cancer although they did not believe that it could presently be demonstrated. The Americans were more emphatic. As far as they were concerned, there was no link between passive smoking and cancer.

If there had not been a jury I would, of course, have been required to decide the "scientific" issue and both, then and since I have contemplated the answer I may have given. It would have been a difficult task. However, I suspect for the jury it was made relatively straightforward.

Counsel for the plaintiff did not directly cross-examine the American professors about the scientific issue. Rather he concentrated on the fact that for many years they had both travelled the world and been paid handsome sums giving evidence on behalf of tobacco companies to the effect that there was no link between "active" smoking and cancer. As a result of one of the "smoking case" settlements in the United States, the information as to their past work for the tobacco industry was available on the Web, including the substantial fees paid to them.

One does not know, but I suspect that the jurors, once they were aware of the extent that the professors had been "advocates" for the tobacco industry, formed a negative view about the defendant's evidence which caused them to discard the whole of the defendant's scientific case notwithstanding the quality of the Australian evidence. Apart from pondering the verdict I may have given, I have also wondered what the outcome may have been if the court had appointed an expert to assist in the resolution of the scientific issues.

Some years ago, when I was a barrister, I was asked to address a seminar about expert evidence. I was the first speaker and an engineer, much respected for giving expert evidence in litigation, was the other. There was the usual discussion period.

I gave an account of the conventional principles which bind an expert who is giving evidence. In particular, I emphasised the fact that experts were required to give objective evidence to assist the court in understanding matters which fall into the expert's area of "special learning". The expert's overriding obligation to the court was emphasised.

To my surprise the engineer who spoke after me, having explained how he conventionally approached his task of gathering evidence, preparing his report and handling the "dangers" of oral evidence, finished with a flourish saying "and of course at the end of the day your fundamental obligation is to do the best you can for your client." Although the discussion which followed was lively, I doubt whether the engineer understood, much less accepted, the error in his approach.

It was also my common experience as a barrister in the early stages of preparation of a case that there would be two typical responses from experts at the first conference. Some experts, having been briefed with the relevant papers, would commence the discussion by indicating that they held a view about the matter which would either be favourable or unfavourable to the client. Accordingly, if they held a view which was adverse to the project they would offer the opportunity for their services to be appropriately dispensed with - and they were.

Other experts would begin the discussion by saying "well I have had a look at the project, what can I say to help you." I recall, on one occasion, having a discussion with a professor of one of the leading universities about the qualities of experts who traditionally gave evidence in the court. He himself commonly gave evidence on

town planning issues. The professor was able to describe for me those experts who would approach the matter with a genuine endeavour to achieve an objective evaluation of the project and those who saw their task as providing the client with the best argument irrespective of the merits of the proposal.

In 2003, Spigelman CJ gave the address at your 4<sup>th</sup> annual conference. On that occasion the Chief Justice spoke of the costs of the litigation process and the need to ensure the continuing effective operation of the adversary system in the contemporary world. The concerns the Chief Justice expressed related to the litigation process in general but are, of course, valid for a court such as the Land and Environment Court for which I am responsible.

Spigelman CJ also spoke on the previous occasion about the nature of expert evidence and the role of experts in the adversary system. His Honour noted the adoption by courts of codified obligations for experts and expressed his hope that this may assist in ameliorating the adversarial culture within which expert evidence is given. However, the Chief Justice indicated that "it is not apparent that the adversarial culture in many areas of conflicting expert evidence will dissipate over time to any substantial degree without further changes." Some of those changes, his Honour observed, were already occurring in the United Kingdom, in particular the use of a single joint expert in many cases.

As many of you may know, since I became Chief Judge of the Land and Environment Court we have instituted a number of reforms, some major and others less so, designed to simplify merit appeals, reduce the time required for a hearing,

encourage pre-trial resolution and enhance the integrity of any decision which the Court is ultimately required to make.

### **The Land and Environment Court**

The Land and Environment Court was created by the New South Wales Parliament with two primary functions. It has jurisdiction to declare and enforce environmental law. It also has jurisdiction to review the merits of the decisions of various bodies. By far the greatest volume of cases undertaken by the Court relate to merits review of development applications made to local councils. The average number of cases of this type each year is about 1,200.

When exercising its merit review function, the Court is given all the functions and discretions of the body whose decision is the subject of the appeal (Land and Environment Court Act s 39(2)).

The Court is also required by the legislation to conduct its proceedings with “as little formality and technicality as possible” (s 38(1)). The Court is not bound by the rules of evidence and “may inform itself on any matter in such manner as it thinks appropriate and as the proper consideration of the matters before the court permits” (s 38(2)). Of course, the process must be fair.

The Court is also provided with an express capacity to obtain the assistance of any person “having professional or other qualifications relevant to any issue arising for determination in the proceedings” (s 38(3)).



Commissioners of the Court must have special qualifications which are listed in s 12 of the Act. The matters in that list relate to the types of problems which they must commonly resolve: planning, engineering, architecture and the like.

The intention of the legislature is clear. When providing an administrative review function within the structure of the Land and Environment Court, it was intended that by the appointment of persons with expertise in relevant areas, decisions in merit matters would be made, if possible, without the conventional trappings of adversary litigation. The Court was provided with authority to make its own enquiries and obtain information, subject, of course, to the right of the parties to respond to any information which is obtained in this manner.

In recent years, it became increasingly apparent that the expectations of the Parliament have not always been fulfilled. In large part, this is the fault of the legal profession. It comes from our inability to contemplate the resolution of any dispute without the conventional adversarial processes. This has meant that merit review is often an intense forensic contest in which there are “winners and losers”, when the legislation intended instead that public and private resources would be applied to achieving the “best community outcome.”

Because merits review has come to be seen as an adversarial contest, there has been an investment of significant political and intellectual capital in achieving a “win”, very often irrespective of the cost in terms of time, money and other resources. Solutions to problems are secondary, the primary object being to beat the opposition. One consequence is that many cases are visited with a plethora of experts,

sometimes each party calling more than one expert on the same issue. The purpose of this evidence is, in some cases, to influence the Court by providing a weight of opinion, without recognising that the Court is more likely to be influenced by the intrinsic quality of the opinion. The purpose for which expert evidence is admissible in proceedings is often lost. Rather than the evidence being tendered to inform the Court about an area of special learning, where the Court may need assistance, it is designed to found a submission which says that the number or weight of opinions in one direction should determine the outcome of the case.

Although the Commissioners of the Land and Environment Court are appointed because of their expertise in particular areas, the range of problems which the Court deals with mean that, in many cases, it must rely upon the evidence of expert witnesses to resolve the issues. Accordingly, as the volume of litigation in the Court has increased, so too has the work available to people with expertise who are prepared to give evidence.

### **The integrity of expert evidence**

The difficulties with the integrity of expert evidence when a court is required to resolve a dispute have been recognised for a considerable period of time. In his well known article, *Justice Learned Hand*, writing in the *Harvard Law Review* in 1901, challenged the accepted utility of expert evidence and the procedures by which it was received in a court:

"No one will deny that the law should in some way effectively use expert knowledge wherever it will aid in settling disputes. The only question is as to how it can do so best. In early times, and before trial by jury was much developed, there seemed to have been two modes of using what expert knowledge there was: first, to select as jurymen such persons as were by experience especially fitted to know the class of facts which were before

them, and second, to call to the aid of the court skilled persons whose opinion it might adopt or not as it pleased. Both these methods exist at least theoretically at the present day, though each has practically given place to the third and much more recent method of calling before the jury skilled persons as witnesses. No doubt, there are good historical reasons why this third method has survived, but they by no means justify its continued existence, and it is, as I conceive, in fact an anomaly fertile of much practical inconvenience."

The article contains a comprehensive discussion of the history and use of experts in the common law system and the perceived difficulties. These difficulties include the observation that in an adversary system the expert becomes the hired champion of one side. Further problems arise from the fact that, generally, the Court is a "lay tribunal", without any expertise, but is required to resolve a dispute between persons who may have expertise at the highest level of a particular scientific or professional discipline.

Learned Hand was writing at a time when the complexity of litigation and the issues which needed to be decided were significantly less than today. That growth in complexity has, of course, been accompanied by an enormous increase in the available knowledge in all areas of intellectual endeavour. Courts can be required to resolve disputes between experts as to the cause of accidents, the past and future financial consequences of the acts of others, the appropriateness of professional action, whether or not the exposure to tobacco smoke or other products can cause life threatening diseases and many other complex matters. The questions which a court must answer may have significant consequences for the reputations of individuals and, of course, very significant financial consequences.

Writing in the Journal of Judicial Administration Andrew Cannon, the Deputy Chief Magistrate and Senior Mining Warden, South Australia said:

"Once their livelihood depends upon the continuing goodwill of either side of the adversarial process, they are under substantial pressure to take slanted, if not outright biased, point of view. If we really want experts who will offer a conscientious, moderate and accurate opinion, there is much to be said for making them responsible directly to the court."

Professor Langbein, writing in the University of Chicago Law Review, outlined a number of what he deemed "advantages" of the German system of civil litigation over the American system, principally in relation to the court-driven selection, engagement and conduct of expert evidence. He criticised the coaching of witnesses by the lawyers, selective evidence and the desire of the expert to become an advocate for his client's case. Langbein went so far as to suggest that the German system, whereby the court made the inquiry, was necessary in the United States.

The expert who sees his or her task as being to help the client, whether it be consciously acknowledged or subconsciously assumed, has been observed by every experienced advocate. Upon the assumption that our civil litigation processes are designed to elicit the truth, we accept that the adversarial system, with its emphasis on rigorous debate, is the most appropriate structure within which to achieve this outcome. For my own part, I have considerable doubt whether this is correct in relation to the evidence of experts.

As Davies J points out in his paper "The Reality of Civil Justice Reform: why we must abandon the essential elements of our system" delivered at the 20<sup>th</sup> Australian Institute of Judicial Administration Annual conference in Brisbane in July 2002, when

the adversarial system is employed to resolve civil disputes and parties are allowed to call evidence from their "own" experts, it is inevitable that the evidence will be infected by adversarial bias. It could hardly be otherwise. Only the most extraordinary person who has been engaged to prepare and give evidence for a client would, when cross-examined, readily confess error, accept their view was wrong and that the client's money was wasted. It would be even harder to do this if the client is a regular litigator or the solicitor for the client is commonly looking for experts to help in forensic contests.

It is not hard to appreciate that the prevailing "culture" in which expert evidence is given needs to be constantly reviewed. And in the Land and Environment Court the financial incentive to do the "right thing" by your client is the more powerful given the potential profit from major development and the fact that many developers will have multiple projects before the Court in any one year.

Whereas ordinary civil litigation involves a dispute between private corporations or individuals where the rules of the contest are known and accepted, even if discovering the truth is not always the object of the parties or the outcome of the case, litigation in the Land and Environment Court requires a decision which not only has regard to private interests but must incorporate the aspirations of the general community. Whether a high rise residential building should be approved will involve the interests of the developer who seeks to profit from the development, the immediate neighbours who may be impacted by it, the local community who may also experience negative impacts from traffic, a drain on community resources or a change in the built environment, and the wider community which has an interest in

ensuring that acceptable housing is provided for all who wish to live within the metropolitan area.

Given the overriding community interest in the outcome, there will be many cases where leaving the parties to call their own experts is obviously unsatisfactory. It can also serve to unnecessarily duplicate the primary research which must be undertaken and increase the length and cost of hearings.

### **The response of the Land and Environment Court**

In the Land and Environment Court, as in other courts, the initial response to the identified problems was to articulate through Practice Directions the expectations which the Court had of the objective and impartial exposition of the issues requiring special expertise. As my experience at the seminar to which I referred makes plain, it must be doubted whether that message has been received, at least by some who give evidence.

The Court has also moved to require experts to confer before the hearing with a view to identifying the matters upon which they agree and those in respect of which they disagree. By this means, it was intended that issues could be narrowed and the views of the experts objectively defined, thereby enhancing the quality of the ultimate decision and reducing the time for the hearing.

Although, in some cases, the pre-hearing conferencing can be demonstrated to have worked efficiently, in others it is apparent that it has not. Two problems have emerged. One is the tendency of some experts to meet but not agree even the

straightforward matters. This causes unnecessary and sometimes significant costs. Often those matters are agreed on the first day of the hearing, after the judge or commissioner has spoken with the experts.

The second problem which occurs with sufficient frequency to be of real concern is where the agreement of an expert given in joint meetings is withdrawn or modified when the expert has had "further discussions" with the lawyer engaged for the expert's client. The joint report required of the experts becomes not so much the expert's opinion, but that opinion filtered by the lawyers.

### **The Court Expert**

Commencing in March of 2004, the Court has imposed a presumption that in relation to any issue requiring expert evidence, a court expert will be appointed. To date, in excess of 300 experts have been appointed and 156 cases involving court experts have been completed.

Although each case must be looked at individually, a court expert will be appointed where the Court is satisfied that there may be cost savings to the parties or where the issue involved is such that the integrity of the ultimate decision will benefit from the appointment of an expert by the Court. When a court expert has been appointed a party may, with the leave of the Court, seek to call an expert who that party has retained. Generally, provided the Court is satisfied that the additional expert will add useful information to the discussion, leave is granted. Experience has shown that the court expert's opinion is not always accepted by the judge or commissioner but that

in every case I am satisfied that the integrity of the decision made has been significantly enhanced.

The number of cases which have been completed utilising court experts is not sufficient to obtain any statistically reliable information. However, I understand that in the 156 cases which have been completed, 53 have settled without the need for a contested hearing and others have taken significantly less time for the hearing to be completed.

Although appointed by the Court, the parties are required to agree on the person who is to carry out the task. The parties are jointly and severally liable for the expert's fees which are generally agreed with the expert by the parties and fixed by the Court. To date it has not been necessary for the Court to intervene and independently fix the fee arrangements.

The Court has found, and I understand that this has been the common experience in England, that in only very few cases, two so far, have the parties not been able to agree on who the expert to be appointed by the Court should be. The English view, which I share, is that the parties faced with the fact that the court will appoint an expert will always prefer to have a person of their own choosing rather than run the risk that the court might appoint a person in whom they have no confidence.

It has been said on a number of occasions that one of the concerns with the use of court appointed experts is that the Court may be denied the complete perspective of available expertise in relation to particular issues. It is said that because the parties



must choose one expert the tendency will be to agree on someone who occupies the middle ground of any particular scientific or professional debate and as a consequence the expert evidence will be "bland". The experience of the Court is that this does not occur. Although those experts who have a reputation for being "partisan" that is favouring one client or one side of the process, may not often be appointed, the fact that the Court will, with leave, allow a party to call an expert who it has engaged, is a sufficient protection against this potential problem. Provided a party can demonstrate that the further expert evidence will add to the available body of information in relation to a particular issue, leave will generally be granted to call the additional evidence.

In recent weeks, I have received reports from members of the Court, practitioners and experts themselves as to their opinion of the quality of the evidence given by court appointed experts. The consistent comment from the judges, commissioners and legal practitioners is that the evidence from persons appointed as court experts reflects a more thorough and balanced consideration of the issues than was previously the case, even when the evidence came from the same person. This is not surprising when discussions with the experts confirm the pressure that they feel as the "court expert" is to ensure that the report they produce considers all relevant matters and, most importantly, provides a balanced analysis of the situation.

It was made plain to me at a seminar some weeks ago, where a number of experts spoke, that at least some experts are prepared to publicly acknowledge that when engaged by a particular party, their evidence has previously been structured to favour that party but, when appointed by the Court, greater objectivity and balance

return. The preparedness to publicly confirm that which we have previously suspected is no doubt a result of the pressure which experts now feel to put forward their credentials for appointment as an expert capable of unbiased assessment of a particular problem. When we made the changes, I anticipated that the appointment of court experts would raise the quality of all expert evidence. That expectation is being confirmed.

Not all issues which the Court must resolve are suitable for the appointment of a court expert and not all matters are amenable to the process. However, typically matters such as noise, traffic, parking, overshadowing, engineering, hydrology, contamination issues, among others, appear suitable for a court expert. Increasingly matters of heritage, urban design and general planning are also being dealt with by court experts, often at the request of both parties and commonly after a request from the council. The court expert has the responsibility to prepare a report after consultation with the parties. In some cases, this may mean consultation with experts which the parties have retained to advise them, but very often the court expert will be the only expert who looks at a particular problem.

The advantages of this approach to expert evidence are many. Because the costs are shared in many cases the costs of expert evidence to both parties are significantly reduced, probably halved. A saving in costs cannot always be achieved. However, there is no doubt that the integrity of the expert evidence is enhanced and this must be reflected in the quality of the ultimate decision.

Although the move to appoint court experts initially met significant resistance from the legal profession, I believe that resistance is now diminishing. With the change has come a clearer understanding of the deficiencies of the old approach and the benefits which change can bring. For the experts, it is about giving back to them the opportunity to use their expertise, without obligation to a client, and the ability to express their views without the distortions that can come from the adversarial process.

It is apparent that some individuals are being more commonly appointed as experts than others. The pool will, I am sure, grow, but it will be the pressure to perform to a high standard which will ensure that the pool maintains its quality.

Many people raise the question of whether or not parties will engage experts to shadow the court expert. It has been the court's experience that this happens in some cases, although the extent of the practice has not been able to be adequately identified. It generally occurs where a project has been prepared with the assistance of experts and those persons continue to be retained to monitor the work of the court expert. In those cases unless the client's experts give evidence the need to prepare a written report, which is often the most costly part of the expert's work, is removed. Because a party will only pay half of the cost of the court expert, the consequence is that the total cost to a party is unlikely to have been increased, although it has probably not been reduced.

### **Concurrent Evidence**

At the same time as the Court has moved to appoint experts, we have also changed the process by which expert evidence is given in Court. This is now done

concurrently and all experts in relation to a particular topic are sworn to give evidence at the same time. What follows is a discussion, which is managed by the judge or commissioner, so that the topics requiring oral examination are ventilated. The process enables experts to answer questions from the Court, the advocates and, most importantly, from their professional colleagues. It allows the experts to express in their own words the view they have on a particular subject. There have been cases where as many as six experts have been sworn to give evidence at the same time.

For hearings in my court, the procedure commonly followed involves the experts being sworn and their written reports tendered together with the document which reflects their pre-trial discussion - matters upon which they agree or disagree. I then identify, with the help of the advocates and in the presence of the witnesses, the topics which require discussion in order to resolve the outstanding issues. Having identified those matters, I invite each witness to briefly speak to their position on the first issue followed by a general discussion of the issue during which they can ask each other questions. I invite the advocates to join in the discussion by asking questions of the witness they have called or any other witness. Having completed the discussion on one issue we move on until the discussion of all the issues has been completed.

Experience shows that provided everyone understands the process at the outset, in particular that it is to be a structured discussion designed to inform the judge and not an argument between the experts and the advocates, there is no difficulty in managing the hearing. Although I do not encourage it, very often the experts who will

be sitting next to each other, normally in the jury box in the courtroom, end up referring to each other on first name terms. Within a short time of the discussion commencing, you can feel the release of the tension which normally infects the evidence gathering process. Those who might normally be shy or diffident are able to relax and contribute fully to the discussion.

This change in procedure has met with overwhelming support from the experts and their professional organisations. They find that they are better able to communicate their opinions and, because they are not confined to answering the questions of the advocates, are able to more effectively respond to the views of the other expert or experts. They believe that there is less risk that their expertise will be distorted by the advocate's skill. It is also significantly more efficient. Evidence which may have required a number of days of examination in chief and cross-examination can now be taken in half or as little as 20% of the time which would have been necessary.

As far as the decision-maker is concerned, my experience is that because of the opportunity to observe the experts in conversation with each other about the matter, together with the ability to ask and answer each others questions, the capacity of the judge to decide which expert to accept is greatly enhanced. Rather than have a person's expertise translated or coloured by the skill of the advocate, and as we know the impact of the advocate is sometimes significant, you actually have the expert's own views expressed in his or her own words.

I am sometimes asked, particularly by advocates, whether concurrent evidence favours the more loquacious and disadvantages the less articulate witness. In my

experience, the opposite is true. Because each expert must answer to their own professional colleague, the opportunity for diversion of attention from the intellectual content of the response because of the manner of its delivery is diminished. Being relieved of the necessity to respond to an advocate, which many experts see as a contest from which they must emerge victorious rather than a forum within which to put forward their reasoned views, the less experienced or perhaps shy witness becomes a far more competent witness in the concurrent evidence process. In my experience, the shy witness is much more likely to be overborne by the skilful advocate in the conventional evidence gathering procedure than by a professional colleague who under the scrutiny of the courtroom must maintain the debate at an appropriate intellectual level. Although I have only rarely found it necessary, the opportunity is, of course, available for the judge to step in and ensure each witness has a proper opportunity to express his or her opinion.

## **Conclusion**

Both the use of experts appointed by the court and the taking of the evidence of the experts concurrently are bringing a very significant change in the "culture" of expert evidence in the Land and Environment Court. The general view of the experts is that both measures free the experts from the control of the client and its lawyers and allow them to reclaim their proper role in the dispute resolution process. That role is, of course, to assist the Court in areas of special learning without being troubled by which party may win the case. There are now significant moves to adopt our approach in a number of other jurisdictions and I have no doubt that the process of change will quicken. It will bring benefits both in relation to the efficiency of the court process and the integrity of its decision-making.

I promised to return to the man with the rocks.

Months after that extraordinary afternoon one of my scientific research people came to me in great excitement. Diligently searching the records they had found that the story which the witness had told could be confirmed but for one matter. He was not at Maralinga but was stationed nearby at Woomera where the British were testing prototype casings for the delivery of atomic and hydrogen bombs. Many different configurations were tried and now needed to be destroyed for the British did not want the Russians, or the Americans for that matter, to know what they had been doing.

The water. Well the casings were made from a magnesium compound which, when you added water, would readily ignite.

The man had been telling the truth.

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