IN THE WARDEN'S COURT
HOLDEN AT SYDNEY
ON 22ND MAY, 1987
BEFORE J.L. McMAHON,
CHIEF MINING WARDEN.

O'DONNELL v. GOLLIN WALLSEND COAL COMPANY LIMITED

On 16th July, 1986 Messrs. Fitzgerald White Talbot & Co., Solicitors of Scone, wrote to me about their clients, Mr. J.D. and Mrs. J.A. O'Donnell, who are the owners of land at 23 Wandobah Road, Gunnedah. The letter made reference to a number of alleged breaches of conditions of a Coal Lease which had been granted to the respondent, Gollin Wallsend Coal Company Limited, by the Minister for Mineral Resources. The letter further referred to a claim for compensation by Mr. and Mrs. O'Donnell against the company in relation to a residence built on the land of the O'Donnell's which it was claimed had sustained considerable damage due to ground motion relating to air shock as a result of blasting being undertaken by the company at the coal mine which was said to be approximately one kilometre distant from the house.

Subsequently my secretary clarified the situation with the solicitors and ascertained that their instructions were to proceed with an application for me to assess compensation in the matter and as a result the matter was set down for hearing at the Warden's Court, Gunnedah, on 30th September, 1986, and subsequent days.

At the hearing, Mr. Connors, Solicitor of Fitzgerald White Talbot & Co., appeared for the applicants, Mr. and Mrs. O'Donnell, while the respondent company was represented by Mr. McEwen of Counsel, instructed by Christie & Partners. The hearing lasted several days and was limited to the issue of cause and liability.

The evidence led from Mr. O'Donnell was that his house stands upon some 89 acres on the Wandobah Road at Gunnedah. He had owned the land for some 26 years and has conducted grazing and pig raising activities over that time. The construction of the subject house commenced in 1979 and he and his wife and daughter went into occupation by Easter, 1980. A plan had been drawn up prior to the construction of the house and it was Exhibit 2 before me. He had been advised that he did not need council approval for the construction and did not obtain such approval. He remembered a Mr. Cox of the respondent company attending at the building site and pointing out to him that there was to be an open cut mine to be sunk in the near vicinity, he had gone to a solicitor called Mr. O'Hallaran at Tamworth who had written to the company and a reply had been received indicating that the company had some tests to do. On that basis construction of the house had gone ahead. He had been an unsuccessful objector at a Warden's Court hearing in 1982 to the company's development.

Mr. O'Donnell swore that up until early 1985 there had been no trouble with the condition of his house excepting for a crack in the gyprock in an area between the kitchen and dining room. In May, 1985 the company had let off what he described as the first blast which was subsequently followed by another and then the third blast and it was this one which Mr. O'Donnell has formed the opinion caused damage which currently exists to his residence.

As a boiler attendant he works at the District Hospital, Gunnedah on night work and during a day in May, 1985 he had been asleep in bed when the third blast was let off. The force of it moved him in bed. He arose and went outside in the company of his wife. The effect of it was so bad that he felt the need to ring the mine manager and complain about it. He stated that the first blast had vibrated his house but the third one had actually moved the house and this

he had informed the mine manager. The manager had informed him that they would need to have the explosive settle down and to get them right but the next blast would be bigger. He felt that that conversation with a Mr. Ray Robinson was late in June or early July, 1985.

Immediately after that third blast in fact on the same day that he had telephoned Mr. Robinson, he had noticed damage to his residence. There was some conversation with a Mr. White, who acted on behalf of the Company, in respect of the extent of the blasting and the vibration it caused. Subsequent blasts were lighter than the third blast and in later written correspondence he had requested he be informed whenever the company was going to blast. Later a Mr. Lyons, also for the company, came to inspect his residence and stood inside it when a blast was set off by the company. That blast vibrated the house again but they were not as severe as the third blast. Mr. O'Donnell swore that even in respect of the blast when Mr. Lyons was present there had been vibration of the windows and other items in the premises. He complained further that there had been another blast in the week before the initial sitting at Gunnedah but none of the blasts had come up to the third blast in intensity. He had marked the dates of the blasts on the calendar which was produced as Exhibit 3. On that calendar I count a total of 19 blasts.

When asked about the extent of the blast while Mr. Lyons was in the home, Mr. O'Donnell had stated that while it had not gone near the intensity of the so-called third blast, it was sufficient to shake the chair on which Mr. Lyons was sitting but that the third blast had shaken his bed.

Cross examination of Mr. O'Donnell revealed that the house had been erected by an unlicensed builder, Mr. Ian White. Mr. White had been married to Mrs. O'Donnell's daughter of her first marriage and there had been matrimonial difficulties. Mr. White's present whereabouts are unknown. Mr. O'Donnell said that

he had been present during the pour of the concrete which had been mixed for the purposes of the slab upon which the house is built and he described the fill which had been placed in the cavity created by the perimeter of brick courses which made up the subfloor brickwork of the premises, as being granular in nature. No specifications in writing had been prepared apart from the plan Exhibit 2. The bricks had been laid by a man who Mr. O'Donnell described as a "gun bricklayer" from Gunnedah. Mr. O'Donnell agreed that no soil tests had been carried out as to the nature of the soil in the area nor of the moisture content nor had any person been engaged to check the timber frame for greenness of timber or otherwise. He agreed that he had arranged for the timber to be cut, then milled at a local mill and then had been stacked for a period of 6 to 8 weeks in preparation for the building. The gyprocking had been done by a plasterer and he, Mr. O'Donnell, had assisted in the preparation of the pouring of the concrete slab.

Mr. O'Donnell was further asked in cross examination whether he had made any photographic record of the premises prior to when he said the cracking took place and subsequent to it and he stated that he had not. He was adamant that the blasting from the mine had caused extensive damage to his premises in the form of cracking of the concrete slab, horizontal movement of it with subsequent pushing out of alignment of the exterior brick walls of the premises and cracking to numerous linings made of gyprock inside. Mr. O'Donnell said that the inspection by Messrs. Donaldson & Jessop, who were later called as witnesses, took place before Christmas 1985. The timber which was in a similar house constructed by Mr. White at Curlewis was similar to the timber in his premises and he said that the Curlewis premises had not cracked.

Mr. Peter Jessop gave evidence as a civil engineer. Along with his colleague, Mr. Donaldson, he had prepared a report which is Exhibit 6, having carried out

an inspection of the premises of the applicants on 20th November, 1985. Their report, prepared in November, 1985, points out various defects in the house as it stood in the nature of several cracks in the brickwork and linings. It concludes that the premises were constructed to good standards and in accordance with normal building procedures and that in relation to the bricks there has been some horizontal displacement which is evidence of severe ground vibration. The linings inside the premises which were made of gyprock were characterised with the separation of sheets at lining joints indicating considerable horizontal strains which were too severe to be due to shrinkage. Mr. Jessop, along with Mr. Donaldson, concluded that the house had sustained considerable damage due to ground motion and related air shock as a result of blasting in the area, most likely from the open cut mining operation approximately one kilometre away. They noted at the time of inspection the building was still quite safe structurally with little chance of collapse. Any repairs would be more of a hindrance than of a benefit in the long term and no repairs were suggested at the time of the report in November, 1985.

A further report was tendered by Mr. Jessop, dated September, 1986 now Exhibit 9. The extent of the cracking evidenced in the November 1985 report, Exhibit 6, was found generally to be more severe with the appearance of additional cracks in wall and ceiling linings and even evidence of cracking in the ceramic tiling of the bathroom. Measurements of levels had been taken in both November, 1985 and September, 1986 and although the September, 1986 report concluded that readings of the earlier measurements were incorrect, it was still considered that the variation in the height of the footings indicated probable damage to them on each side of the south western corner of the house. The damage to the brickwork was considered to be inconsistent with ground motion movement, brick growth, shrinkage or temperature effects and the levels taken showed that the subfloor structure had a marked movement in it at the south

western corner of the house indicating the need for full under-pinning and stabilisation of the footings before an attempt was made for new brickwork to be constructed. The report concluded that repairs to the timber framing and linings could not be justified until a new floor slab was completed as the condition of the premises did not lend itself to superficial repairs. Taking into consideration any salvage value of materials excluding relocating expenses, it was felt attempts at renovation unjustified and that the house should be demolished and replaced at a cost of approximately $98,000.

In cross examination Mr. Jessop conceded that he was not an acoustical engineer although he had stated that he had been in the presence of other acoustical engineers when they had conducted inspections of premises that had been affected by vibrations due to blasting.

Mr. Jessop said that he had carried out some investigation in respect of the loads born by the trusses on the roof and produced as Exhibit 11 a diagram indicating that the girder trusses each carried loads of 1.39 tonnes and the hip trusses of .45 tonne each. His conclusion was that the strains so distributed throughout the roof were not enough to cause any damage to the structure and were such that wind would not uplift the roof nor dislodge it.

Some tests had been carried out on the residence of Mr. & Mrs. O'Donnell and Mr. Jessop had been present when some bricks were removed below the floor line on the south-western corner of the house. He deposed of having seen then a gap between the plastic membrane which was to the underside of the concrete slab, and the granular infill material which had been deposited to support the slab. He felt that this gap extended from between 1.5 and 2 metres under the slab but he had not taken any action to inspect it by use of a mobile light or otherwise. He was asked some questions about reports which had been prepared

by other professional engineers but had seen no evidence of plaster being bowed around a timber brace in a wall nor did he see any evidence of cracking of the gyprock adjacent to a wall brace which was not fully recessed. He said that only one door was jamming in the house and that was the one between the lounge room and the hallway. He did not disagree with evidence by surveyors about the levels and as far as the soil under the foundations was concerned he felt that it was fairly stable. He felt that the floor was relatively stable but that there was an indication of some 16 mm difference from a datum post to the north east corner of the building. He said that he believed the workmanship of the house was reasonable and in this regard he was to disagree with other subsequent witnesses but as to the strength of the house and the fact that blasting would have on it, he felt that it was beyond his capabilities to give any opinion. He felt that cyprus pine was a reasonable timber with which to build and that moisture change which could cause shrinking was minimal.

Mr. Jessop's partner, Mr. R.J. Donaldson, a chartered architect, then gave evidence of having inspected the O'Donnell residence on two occasions. It is a result of the first inspection that he and Mr. Jessop prepared the first of the reports which are now exhibits before me. Mr. Donaldson gave evidence of having seen the damage to the external and interior walls and while he said that he felt that the quality of construction of the frame was at the poorer end of the scale and a little below average, it was not the worst one he had seen and was adequate. It was put to him as to whether he had witnessed the bases of trusses resting on internal wall studs but he had seen no evidence of that and felt that the placement by the trusses on the load bearing points was a satisfactory distribution and not a heavy load on the four corners of the building. As far as use of cyprus pine was concerned it was necessary at all times in construction to use it while it was still green because when it became dried and devoid of moisture it was prone to splitting when nailed. In

any case he said that it had a relatively low shrinkage rate. As far as the taking up of a stud was concerned as depicted in one of the photographs he said it was common practice. He had never heard the suggestion that the archway had been put in by the use of a chainsaw and the use of a splintered piece of timber adjacent to the archway would have no adverse effect on the wall. He also had seen the gap between the gravel infill and the plastic membrane and described it has being one of 4 to 5 mm thick and in some 1.25 m from the southern wall but felt that the mass of the gravel was not sufficient to force the brickwork out. He said further that the slab had not subsided nor had been compressed where he saw it above the gravel infill but he had racked his brains for sometime to understand why a gap had existed. He felt that there had been no significant deflation of the slab on the north eastern corner of the building and had absolutely no idea why it was there. Finally, he could not say if poor workmanship or blasting had done the damage which he witnessed to the house but could not give any clear explanation as to why the building had become defected in the way it was.

Mr. Donaldson agreed that the soil upon which the O'Donnell home was built may have been prone to movement. He was asked whether he had ever heard of "slab heave" and agreed that that could happen in this case. However he felt the house was built to an acceptable standard of workmanship but that a 17mm drop in river gravel which had a depth of 500mm was an "awful lot".

Mr. T.C. Jones, the Chief Health and Building Surveyor of the Gunnedah Shire Council stated that it had not been a legal requirement for the O'Donnells to apply for the council's approval to construct the subject dwelling because it was outside the area in which council approval was needed. There was a record of Mr. O'Donnell having approached the council and his having been told that.

Mr. Jones said that he had been present when a gyprock sheet had been removed from the kitchen and hallway. He felt as to the frame of the residence while not of top class material, workmanship was to a satisfactory standard. He confirmed that it was necessary to work with cyprus pine while it was still green because of splitting and cracking which occurs when it becomes dry. He spoke of the builder, Mr. Ian White who had also constructed the residence in Curlewis within the Gunnedah Shire and in respect of which the Council had the responsibility to give a building approval. That house had been supervised and inspected by the council, its footings being of the same as the O'Donnell residence. Mr. Jones knew nothing of failure in the structure of that home. In cross examination Mr. Jones said that if cyprus pine were left for any longer than 5 to 6 weeks it may start to warp and twist unless held in place. He had first gone to the O'Donnell residence in September, 1985 to look at it and had observed crackings internally of the house. He had seen tiles falling off the verandah and generally cracks in the brickwork. He was unable to ascertain how long those cracks had been there.

In relation to the suggestion that because the house that Mr. White had constructed at Curlewis had not failed as against the O'Donnell residence which had, Mr. Jones agreed that the soil at Curlewis could not be regarded as reactive. The reactive characteristics of the Gunnedah soils had not come to notice until fairly recently and nowadays when a person is considering building on them the council requires an engineer's certificate as to the footings.

For the defence, Mr. G. Henry gave evidence as a construction engineer. He agreed that he had no formal qualifications in soil nature but as a part of his Bachelor of Engineering degree course the soils had to be studied. His report was tendered as Exhibit 16. He had conducted a survey of the various residences in the area commencing from the residence of persons called Egan,

then to the Pike residence, to the Davis residence, the Carlyon residence and finally to that of Mr. & Mrs. O'Donnell. He agreed in the report that the purpose of his inspections was to ascertain the effect on the houses of blasting activities being carried out. In his report he described the type of soil as notoriously bad as a foundation material and therefore care was required in the design of footings for buildings. He said that many buildings within the township of Gunnedah had been damaged by the swelling and shrinkage movement of foundation material. As to the Egan residence which was within 800 metres of the mine, he felt that because of the proximity to the blasting activities that home had been severely damaged by them. Even so, he said, the effects of ground swelling could be evident in concrete slabs at the residence.

The Pike and Carlyon residences were approximately 1.6 kilometres from the mine and constructed in similar style to that of the O'Donnell residence. He advised that there were minor hair line cracks evident in the ceilings of both residences but this was not uncommon although he did concede that vibration could have caused them. There was some evidence of minor movement in the top of some brick piers supporting the tile roof at the front but attributed this primarily to ground movement although he did not rule out vibration. The Davis residence which is only of new construction was not damaged in any way. The O'Donnell residence was described in detail by Mr. Henry and he produced in Exhibit 16, some photographs and drawings. He concluded that the wall framing had been poorly constructed with top plates not being spliced nor levelled. He attributed the damage which he described to settlement of fill underneath the concrete slab. Furthermore he expressed the opinion that the foundation movement evident by reason of the cracks in the north east near the carport were most likely due to shrinkage of the clay under the strip footings. He concluded that the blasting operations at the mine were in his opinion not

directly responsible for the damage to the O'Donnell residence although the blasting activities may have precipitated damage which would have ultimately occurred. I interpretated this as meaning that the damage would have eventually occurred but the blasting activities might have accelerated its onset. In relation to the trusses he had felt that their bottom chords coming into contact with the top internal wall plates which were of such light timber would mean the transference of weight to the bottom of the internal walls and would also result in overstressing of the roof trusses.

He had seen the material below the slab and had felt that settlement of it could have caused the cracking evident in the internal walls. He agreed that the house was indicative of very poor workmanship and shrinkage of the timbers. When asked about distance from the mine of the O'Donnell residence he agreed that it could be 1 km and not 1.6 km as indicated in Exhibit 16. When it was put to him that the vibration-caused damage had not been ruled out in respect of the O'Donnell residence, Mr. Henry said that the percentage of likelihood was possibly .5 of 1%. Notwithstanding his comments in Exhibit 16 he had to agree in cross examination that he had not seen any girder trusses at the time of his inspection. He agreed that the soil beneath the slab had shrunk and that moisture was more accessible to it only at the perimeters. He had been present when the core sample had been taken from the north western corner of the O'Donnell residence. He could not say that he had seen any screw in the gyprock which had been mis-shapened by the pressure of movement of the residence. His conclusion was that the infill material had been forced down thus forcing the bricks in the southern wall out in a southerly direction, in other words the granular infill material was compacting and putting pressure on the wall. He had been present when a blast had been let off at the mine and had noted that the blast had not caused any damage. In relation to this matter, Mr. O'Donnell had observed in chief that that blast was simply a "fizzer" compared to the

other blasts which he had experienced earlier and in particular the third blast. As to the geological features of the soil, he agreed that even over a short distance from the O'Donnell residence on the one hand and Messrs. Carlyon and Pike residences on the other there could be a variation. He finally agreed that blasting could have adverse effect upon a building which had been constructed out of what he described as inferior materials and conceded at the end of Exhibit 16 that there had to remain a remote possibility that the blasting operations may have provided the catalyst to initiate both the internal and external cracks through combined forces of vibration and over-pressure.

Mr. A.B. Love, a consulting engineer, gave evidence of a geotechnical investigation conducted at the home of Mr. & Mrs. O'Donnell. His report is Exhibit 19. He said that the soil exhibited considerable variations in shrinking and swelling resulting in substantial instability with changes in moisture content and based on the surface movement calculations the site upon which the home is built would be classified as highly reactive and therefore subject to considerable movement causing strains and pressures on the house. Mr. Love said that the stress exhibited by the house was consistent with the support of the house on foundations which he considered to be inappropriate considering the reactive nature of the subsurface materials. Even if the cracks were repaired movement in the structure would result in the associated distress continuing. He produced a number of figures and analyses in respect of the five boreholes which were sunk with the consent of Mr. & Mrs. O'Donnell. In answer to myself at the end of his evidence he said that he was absolutely certain as to the correctness of his conclusions. Those conclusions were, put simply, that it was the nature of the highly reactive soil which shrunk or swelled, depending upon moisture content, which had caused the damage to the house. The foundations were inadequate to cope.

Mr. R. Kelly, a geologist who has the position of Production and Blast Engineer with the respondent company, gave evidence and produced as Exhibit 20 a plan of the applicant's property and that of the open cut area. He felt that because of the geological stratum the Pike residence which was exactly the same distance from the blasts as the O'Donnell residence would suffer greater vibrations. Exhibit 21 was the computer print out of blasts which took place between 27th May, 1985 and 24th October, 1986. It indicates, according to Mr. Kelly, efforts by the company to reduce the effect of the blasting and while Exhibit 15, a letter from the State Pollution Control Commission indicates that the level specified by the Commission had been exceeded in respect of the blasting noise on a number of occasions in the first 12 months of operations, since June, 1986 upon monitoring every blast it has been found that only 6 have exceeded the Commission's requirements, explanation for which has been accepted by the Commission. Mr. Kelly said in evidence that he had been in touch with Mr. O'Donnell prior to each blast either by personal or telephone contact and agreed that Mr. O'Donnell had complained to his company about the blasting.

Mr. J.A. Wood gave evidence as a qualified architect. He discussed the shrinkage characteristics of cyprus pine and had been present when the gyprock sheeting had been removed from the wall of the house. He said that damage in certain aspects was fairly and squarely caused by poor workmanship and by the shrinkage factor, the latter aspect being insignificant compared with the poor workmanship. The footings were said to have been placed on reactive clay soils and it was found that the depth of footings were totally inadequate to cope with the loads created by the building bearing in mind the nature of the reactive soil. Footings of 300 mm were in existence whereas in fact the proper depth was at least twice that. Mr. Wood had found that the joinery work was deficient but conceded that it was difficult to make an inspection behind existing gyprock walls and other covered areas. His report is Exhibit 23 and contains a number of photographs depicting deficiencies in the workmanship.

Mr. C.R. Stewart, a surveyor in practice at Gunnedah gave evidence about the levels. He felt that there were considerable variation in the levels of the floor of the residence but conceded in respect of some of the levels taken inside the residence that he had not taken into account the pile on the carpet.

Mr. R. Heggie, an Acoustical Engineer, gave evidence that the effect of the vibrations from the blasts at the O'Donnell residence was .02 mm which was only a fraction of the width of a human hair. In those circumstances it would be highly unlikely that any blast would cause any damage to the O'Donnell residence. He attributed the existing movements to the soil which created a fatigue mechanism and that it was unlikely that the blasts would have had any adverse effect on the residence at all.

Finally Mr. O'Donnell gave evidence that under no circumstances did he tell anyone that the archway had been cut by a chainsaw. The blast measured by Mr. Heggie and other personnel was a "fizzer" compared to the third blast which he had previously said had almost thrown him out of bed. Mr. O'Donnell confirmed that the gravel had been well placed in position as infill material to go underneath the slab and that it had been consolidated.

In this matter I have conflicting evidence from experts. It is appropriate for expert evidence to be given on matters such as those requiring determination in this matter, that is, as to the cause and effect of the damage to the house. It is expected that it is the duty of experts called in matters such as this to give the necessary scientific criteria and reasons for their opinions to enable a tribunal to come to its own independent judgment by application of those criteria to the facts proved in evidence. That is not to say however that a tribunal has to accept even uncontradicated evidence of an expert but

generally it is sufficient to say that once qualifications are accepted of an expert, it is permissible for the witness to be able to express his opinion of matters upon the basis of various hyperthetical assumptions put to him (Regina v. Campbell Court of Criminal Appeal 27.6 1980 unreported). Any challenge to reasoning by which the opinion is arrived at is matter for cross examination.

Determination of the value of expert evidence is precisely what must take place in this case. The cross examination of Messrs. Jessop and Donaldson who were called by the applicant illicited that each had no experience in the field of acoustical engineering and their reports which contained the opinions within expressed were prepared without Messrs. Jessop and Donaldson having before them the statistics as to the intensity of the blasts. Furthermore, Mr. Jessop said in cross examination that having seen the report from Douglas and Partners which related to the laboratory tests to the soil, that his opinion would be in the realm of conjecture.

Mr. Jessop's partner, Mr. Donaldson, an architect, had placed his name along side Mr. Jessop in expressing the expert opinion that the damage to the O'Donnell residence was caused by the blasting. He subsequently agreed that movement in the concrete slab, called in the evidence "slab heave", could have been the cause of the damage which he had observed to the residence.

The evidence of Messrs. Jessop and Donaldson was contradicted by that of Mr. Henry who said that the damage to the residence was most likely caused by unsatisfactory workmanship and the settlement of the in-fill material placed in the foundations to support the slab. Likewise, Mr. Love, an architect, disagreed with Mr. Donaldson, having undertaken the geotechnical investigation

of the soils and attributed damage to the considerable movement in the slab caused by the highly reactive soil which put stress on the house foundations. Furthermore, Mr. Heggie, the acoustical engineer, which Mr. Jessop was not, in his evidence described the effect of blasting to the extent that he said it was improbable that the ground vibration or air blast over pressure effects of blasting at the mine was either the cause or a contributing factor to the damage to the O'Donnell residence.

Their evidence is supported by that of Mr. Wood, an architect, who attributed damage to the poor workmanship and the shrinking factor and that of Mr. Kelly, geologist, who gave some uncontradicted evidence about the geological layout of the area and the fact that his opinion was the Pike's residence would suffer greater vibrations than the O'Donnell residence and that the Pike's had remained undamaged.

This matter has proceeded on the basis of being a claim for damages as if it were a hearing of a civil cause. However, there are special rules applicable to it as laid down by the legislation and I refer in particular to Part VIII to the Coal Mining Act, 1973. That Part provides by Section 97 that the occupier of any Crown land or the owner or occupier of any private land not being the subject to a concession (and Section 6 provides that "concession" means inter alia "a coal lease") is entitled to compensation for loss referred to in Section 98(1)(b) suffered, or likely to be suffered, by them as a result of the grant of the concession or the exercise of the rights conferred by the Coal Mining Act or the concession on the registered holder of the concession. There is further provision in that section that agreement may be reached between the parties but if such agreement cannot be reached, assessment by a Warden shall take place. The criteria under which a Warden makes an assessment of

compensation is therefore restricted and laid down in Section 98(1)(b). These matters are:-

(i) damage to the surface of land, and damage to the crops, trees, grasses or other vegetation on land, or damage to buildings and improvements thereon, being damage which has been caused by or which may arise from prospecting or mining operations;

(ii) deprivation of the possession or of the use of the surface of land or any part of the surface;

(iii) severance of land from other land of the owner or occupier of that land;

(iv) surface rights-of-way and easements;

(v) destruction or loss of, or injury to, or disturbance of, or interference with, stock on land; and

(vi) all consequential damage;

The hearing of this matter has been directed towards the damage to the residence which in my opinion is clearly covered by paragraph (i), being a building and improvement on land which is not subject to the concession, but which is in such close proximity to it that it, as suggested by the applicant, was affected by the blasting.

The question then is: is all of this opinion evidence as between Messrs. Jessop and Donaldson on the one side and Messrs. Henry, Love, Heggie, Wood and Kelly on the other, sufficient for me to find that there is evidence to establish that the applicant has established responsibility in the respondent to the balance of probabilities? I do not and must not overlook the evidence of Mr. O'Donnell, a sensation-witness, to the blasts, especially the third one.

Furthermore, not to be overlooked was the engineer for Gunnedah Shire Council, Mr. Jones, who gave evidence that the reactive nature of the soil at Gunnedah had only recently been realised and that the builder who constructed the dwelling was unlicensed. He was never called as a witness nor indeed was the

bricklayer nor any other tradesman who may have assisted, for instance, in the pouring of the concrete slab. I note that there was evidence that the builder, Mr. White had constructed another dwelling at Curlewis which is said to not have been subjected to some structural damage that has affected the O'Donnell residence but there is evidence before me to show a difference in the nature of the soil type at Curlewis compared to that in Wandobah Road at Gunnedah where the residence of the O'Donnells is built.

The evidence really for the applicant boils down to this. Mr. O'Donnell says that the damage was not detected up to 1985 excepting for a minor crack. After the third blast which nearly threw him out of bed, cracks started to appear and now there is obviously substantial structural damage to the house. Messrs. Jessop and Donaldson formed opinions as to the cause of the damage to the house and put it down to the blasting. These gentlemen were not present when the blasts took place as indeed neither were any of the persons who gave evidence who have expressed expert opinions. Mr. Henry does not agree with Mr. Jessop; Mr. Love does not agree with Mr. Donaldson, nor does Mr. Wood, nor does Mr. Heggie, the later being the only acoustical engineer from whom I have heard.

It has been well said over the years that tribunals making determinations in court hearings should not, and indeed must not, leave out of their consideration their own experiences and their reliance upon common sense. That does not mean however that a tribunal can disregard evidence before it. I am compelled to say that if someone had asked me as a layman to look at the respondent's activities in developing the open cut coal mine in such close proximity to the applicant's residence and then look at the damage which an inspection of that residence would make manifest, I would have concluded with little hesitation that the blasting activities at the coal mine had caused the damage. Perhaps 99% of citizens who are laymen as far as explosives and structural damage are

concerned, would have come to the same conclusion. I am however bound not to ignore expert evidence, provided it seems to me to be reasonable and reasons and criteria are given and bearing in mind that cross examination of the witnesses, especially those for the respondent, did not reduce the impact of the strength of that evidence upon me.

As to Mr. O'Donnell's own evidence, it is a common experience and I have evidence of this from Mr. Heggie that vibration would be amplified if one were lying in bed or upon some soft furnishing and with this in mind can I say that it would be safe to conclude in the face of the weight of expert evidence called by the respondent in contradiction to the now wavering expert witness called by the applicant that I am satisfied to the balance of probabilities that the damage to the O'Donnell residence was caused by the blasting activities. I regret to say that the evidence before me is such that I feel myself not satisfied that the applicant has discharged the onus of proof and as such I find on the evidence the respondent not responsible for the damage to the O'Donnell residence arising from the use of explosives.

I turn now to the question of costs. In the twelve years that I have been Chief Warden, I can recall only one occasion when I have awarded costs in a compensation hearing and there has never been any correction of this practice by an appellate Court. While this particular matter has proceeded on the basis of being a civil action, I am, as already indicated, bound to comply with the directives of Section 98 (or the parallel Section 124 in the Mining Act) and as either party (i.e. mining title holder or land owner/occupier) is entitled to make application for assessment of compensation in the absence of agreement being reached, I have usually felt it inappropriate to award costs to a successful applicant; the reason being that if I had adopted that practice of awarding

costs to a successful applicant, there would always be a contest between the parties as to which would lodge an application first. Determination of the issues in this matter has given me some difficulty, especially in the light of conflicting expert evidence and my own initial reaction that the damage to the residence would have been caused by the blasting. I am aware that the respondents have gone to considerable expense to disprove the applicant's claim by the use of expert evidence, not to mention the briefing of counsel and instructing of attorneys, but it seems to me that in the light of the dictates of the Act, it would be the fairest result for me not to depart from my usual practice in not awarding costs. Therefore the parties are to pay their own costs.