COMMENT ON WATER AND MINING: CONTROLS IN CONFLICT

By P. J. Watson*

The title to the paper I am commenting on — 'Mining and Water: Controls in Conflict' — implies that there is a fundamental conflict between the various legislative enactments and administrative procedures by which mining and water are respectively controlled. The existence of conflict in legislative terms is amply demonstrated in the paper by Michael Crommelin and Rosemary Hunter. It is my task to examine this question of conflict in controls from the viewpoint of personal practical experience.

Few lawyers ever become directly involved in such practical matters as obtaining access to water for the purposes of mining operations and I must confess to being one of the many. What practical experience I have been able to bring to bear in preparing this paper is, of necessity, not my own. I am indebted to Alan Carpenter, the property officer of Kalgoorlie Consolidated Gold Mines Pty. Ltd.[1] for his assistance in areas of practicality. As Mr. Carpenter's experience is primarily in the Kalgoorlie region, most of my practical comments are of particular relevance to that region. In any event my paper is confined to the Western Australian scene. I intend to consider the topic by a general overview and then by examining a number of particular areas such as:

1. the extent to which the Mining Act 1978 confers rights to water which can be exercised independently of the Rights in Water and Irrigation Act 1914;
2. exploration for water;
3. land tenure requirements for the valid use of water; and
4. some miscellaneous issues.

To set the scene for consideration of the topic, a little potted history may be of assistance or interest.

BACKGROUND

When mining commenced in the Kalgoorlie region prior to the turn of the century, the miners satisfied their water needs by transporting water from Perth by road at high expense and by sinking wells near to salt lakes to gain access to the highly salinated ground water associated with those lakes. The saline water derived in this manner was boiled and condensed to produce a purer substance suited to the processing technologies of the time. This process of desalinating ground water had an expense of a dif-

* LL.B. (Hons.) (Melb.), Solicitor, Perth.

1 Kalgoorlie Consolidated Gold Mines Pty. Ltd. is the recently formed management company jointly owned by Homestake Gold of Australia Limited and the Gold Mines of Kalgoorlie Limited Group to which has been entrusted management of the whole of the Golden Mile operations of its owners. Prior to his appointment with this company, Mr. Carpenter was the property officer of Bond Gold Australia Pty. Ltd.

ferent kind. Such timber as there was then available in the Kalgoorlie region became prized as a fuel to fire the boilers as well of course to shore-up the underground mine workings. The result of this process left the Kalgoorlie region largely denuded of timber and this is still the case today.

Shortly after the turn of the century the famous engineer, C. Y. O'Connor supervised what, at the time was one of Australia's engineering marvels: the installation of the Perth to Kalgoorlie water pipeline. This pipeline provided sufficient water for the immediate needs of the Kalgoorlie region both domestically and for mining purposes. It remained largely sufficient until as late as the 1980s.

With increasing gold prices in the 1980s as well as the development of open-cut technology in relation to gold mining (enabling the mining of larger volumes of low-grade material) the demand for water in the region substantially increased. At the present time the Perth–Kalgoorlie water pipeline is no longer sufficient to satisfy all of the needs of the existing and prospective mining operations in the Kalgoorlie region. Moreover there is a considerable cost associated with taking water from the pipeline as the Water Authority is seeking to impose on Kalgoorlie miners an obligation to contribute substantial sums to the costs of maintaining and upgrading the water pipeline.

The increased demand for water in the Kalgoorlie region has forced miners to look for alternative sources of supply. The area is not blessed with a substantial artesian water basin. There are, however, numerous fissure and fracture collections of underground water as well as a substantial deep paleochannel system. The paleochannel system consists of ancient deep river beds, the water in which is at least five times as salty as sea water. Unlike other artesian sources of water supply the paleochannels are extremely slow to replenish by natural means, and the water flow within the channels is much slower than the rate at which water is likely to be drawn from a particular draw point. The successful use of the paleochannel system consequently requires the establishment of an extensive integrated borefield.

For the major gold mining operators in the Kalgoorlie region today the paleochannel system represents their major water source. Unlike their predecessors, they do not desalinate the water in order to use it in their processing operations. Rather they have found a way to alter the pH level of the water so as to neutralise the corrosive effects of its salt content on the metal surfaces in the processing plants.

To put a little perspective on the need for water in the gold mining industry, particularly as it is now being conducted in the Kalgoorlie region, it takes one tonne of water in order to process each tonne of ore mined. When it is realised that with the advent of the proposed 'Super-Pit'[2] in Kalgoorlie, something in the order of an additional 5 to 8 million

2 The Super Pit is a large scale open-cut gold mining operation involving the integration and co-operative expansion of the open-cut mining operations of Kalgoorlie Mining Associates and the Fimiston/Paringa Joint Venture.

3 Mining Act 1978 (W.A.) (all subsequent references to the Mining Act in the paper and these footnotes are to that legislation).

tonnes of ore will be processed each year, one can see that the quantity of additional water required is considerable.

THE CONFLICT IN GENERAL TERMS

It is axiomatic that mining is a high risk, high cost, long-term business activity. This is generally recognised in the Mining Act 1978 (W.A.)[3] and the manner in which that legislation is administered. The structure of the title system for mining flowing through prospecting licences, exploration licences to mining leases with priority for the grant of the ultimate title (a mining lease) being conferred on the holder of a prospecting or an exploration licence,[4] affords a degree of certainty and longevity of title (sufficient to afford the opportunity for reward for the risks and capital expenditure involved). The primary philosophy of the mining legislation and its administration is the promotion of the mining industry and its maintenance as a viable and successful industry.

On the other hand, insofar as rights to water must be obtained under the Rights in Water and Irrigation Act,[5] the system of title (in this case licensing) is much less certain. The Rights in Water and Irrigation Act confers no rights to water in itself, its licensing system being permissive rather than proprietary.[6] There is no statutory progression from exploration to production phase. Licences are short term.[7] There is no statutory mechanism for their renewal and they are not expressly transferrable. Most importantly, in terms of the volume of water which may be taken under a particular licence, this can be altered at any time at the discretion of the relevant authority.[8] There appears to be no avenue of appeal against a decision of the authority to reduce the volume of water that a licence holder may take.

The general philosophy of the Rights in Water and Irrigation Act is evidently to control access to water with a view to fairly sharing the available resources.[9] The objective appears to be to spread the available resource amongst the competing users from time to time. No particular industry or use is given priority over any other. Unlike the Mining Act (which provides for objections to the grant of all forms of title)[10] the Rights in Water and Irrigation Act contains no procedure for objections to the granting of licences (even by current licensees who consider their water flow may be affected by a new licence being granted). This absence of an objection procedure leaves the attainment of the policy of the Rights

4 Mining Act, ss.49 and 67.
5 Rights in Water and Irrigation Act 1914 (W.A.) (all subsequent reference to the Rights in Water and Irrigation Act in the paper and these footnotes are to that legislation).
6 Rights in Water and Irrigation Act, ss.13, 26A and 26B(3).
7 Typically issued from one year to three years.
8 Rights in Water and Irrigation Act, s.26G(2).
9 In its statement (reference no. 01285) concerning the extension on 17 October 1986 of the Eastern Goldfields Groundwater Area the Water Authority states,
The objectives of the groundwater management:
1. To protect the groundwater resource from damage
2. To allocate the available groundwater resources fairly and protect users
3. To optimise the benefits from groundwater use.
10 Mining Act, ss. 42(2) (prospecting licences), 59(2) (exploration licences) and 75(2) (mining leases).

in Water and Irrigation Act largely in the hands of the Water Authority alone.

The above features of the two pieces of legislation and the administration of them leads one to conclude that they are unhappy bed fellows and a source of some concern for the mining industry. Clearly the Rights in Water and Irrigation Act has no recognition for the risks and costs involved in the mining industry. It leaves the miner in search or need of water to ensure a viable mining project in the hands of the bureaucrats. The fact that mining and water are generally administered under different Acts and by different authorities adds to the administrative burden of mining companies. Not only must they deal on a regular basis with title and licence applications and renewals under both sets of legislation, but they must also be responsive to the administrative requirements of both the Mines Department and the Water Authority.

RIGHTS TO WATER CONFERRED BY THE MINING ACT

In the principal paper, the authors[11] have explained how the Mining Act itself confers rights to take and use water on holders of titles issued under the Mining Act.[12] They have explained how these rights are, by the Mining Act, subjected to the Rights in Water and Irrigation Act. They have suggested that (except in the case of surface waters outside irrigation districts and proclaimed areas) the water rights conferred by the Mining Act are most likely not capable of being exercised without licensing under the provisions of the Rights in Water and Irrigation Act.[13] In general terms I concur with this proposition. It is also supported by the decision in *Garbin v. Wild*.[14] That case concerned the issue whether an owner of private land was required to hold a licence under the Rights in Water and Irrigation Act to obtain water from an artesian well. Section 15(2) of the Land Act 1963 (W.A.) empowered the owner of the land to 'sink wells and enjoy the water therefrom to a depth beyond the distance of 200 feet from the surface of the land'. The Full Court held that as a matter of construction, the general provisions of the Land Act must yield to the special provisions of the Rights in Water and Irrigation Act. Likewise I suggest it is likely that the general provisions of the Mining Act, insofar as they deal with water, will yield to the special provisions in the Rights in Water and Irrigation Act.

Notwithstanding this decision there remains some surface water which can be used in reliance upon the Mining Act rights without licensing under the Rights in Water and Irrigation Act. Section 6(1) of that Act provides that Division 1 of that Act (which deals with surface water) has no application in respect of surface water which is within the boundaries of a property which has been granted or demised by the Crown.[15] It seems to me that a mining lease constitutes a demise for the purposes of this

11 Crommelin and Hunter.
12 Mining Act, ss.48(d) (prospecting licences), 66(d) (exploration licences) and 85(1)(c) (mining leases).
13 Crommelin and Hunter n.34 *et seq.*
14 [1965] WAR 72.
15 See also Rights in Water and Irrigation Act s.19(2).

section.[16] As a result, it is my belief that owners of mining leases have the right to use surface water which is within the boundaries of their mining lease without obtaining any licence under the provisions of the Rights in Water and Irrigation Act.

I am undecided whether an exploration licence or prospecting licence under the Mining Act constitutes a grant or demise from the Crown (such as would entitle the holders of those licences to use surface water which is within the boundaries of their licence without licensing under the Rights in Water and Irrigation Act). I am inclined to the view however that they are not grants or demises for the purposes of section 6 of the Rights in Water and Irrigation Act.[17]

Where a prospecting licence or exploration licence has been granted over private land, *i.e.* land previously demised or granted by the Crown, then I think the rights to water granted under the Mining Act can be exercised by the holder of the prospecting or exploration licence in respect of surface water without licensing under the Rights in Water and Irrigation Act. It is to be noted that the prospector or explorer has no rights under the Mining Act to use water which has been artificially conserved on private land without the consent of the owner.[18] This limitation does not apply to water in lakes, lagoons, swamps or marshes which are within or from rivers and streams rising within the boundaries of a particular property.

The rights to water conferred under the Mining Act extend to water in excavations arising from mining activities previously carried on.[19] A question arises as to whether the holder of a prospecting or exploration licence or a mining lease is required to obtain a licence under the Rights in Water and Irrigation Act to use water which is in an excavation made in the course of mining. In my opinion the controls on surface water in the Rights in Water and Irrigation Act apply only to naturally occurring surface water (in lakes, lagoons, *etc.*).[20] On this basis, I am of the view that the Mining Act entitles holders of prospecting and exploration licences and mining leases to use water in all mining excavations without licensing under the Rights in Water and Irrigation Act.

What of water which collects in underground mine workings (either as a result of those workings encountering naturally occurring underground water or from the seepage of rainwaters)? The control of underground water under the Rights in Water and Irrigation Act is limited to water in an 'underground source of supply'.[21] This expression is not defined in the Rights in Water and Irrigation Act but suggests to me a naturally occurring and continuous supply of water (as opposed to a

16 *Barnsdall v. Bradford Gas Co.* [1974] AC 207.

17 A. Lang and M. Crommelin, *Australian Mining and Petroleum Laws* (Butterworths 1979) 106.

18 Mining Act, s.29(7)(c).

19 *Ibid.*, ss.48(d) (prospecting licences), 66(d) (exploration licences) and 85(i)(c) (mining leases).

20 Rights in Water and Irrigation Act, s.2(1): ' "Lake, lagoon, swamp or marsh" means a natural collection of water whether permanent or temporary, that is not part of a water course.'

21 *Ibid.*, s.26.

source of water arising only as a result of human activity and the intervention of the weather). It is my view that where underground workings encounter naturally occurring underground water, there is at least a prima facie argument that a licence under the Rights in Water and Irrigation Act is required for the exploitation of that water. On the other hand, it is my view that where water collects in underground workings as a result of rain, that water may be utilised for mining purposes without licensing under the provisions of the Rights in Water and Irrigation Act.[22] I should say that my views regarding water in underground mine workings are not shared by the Water Authority. Announcing, in October 1986, an extension, to the proclaimed Eastern Goldfields Groundwater Area, the Water Authority stated 'the drawing of water from a mine shaft for purpose of providing a water supply or for mine dewatering must be licenced'.[23]

While there may be particular water sources which the holder of a mining lease (and possibly also of an exploration or prospecting licence) may have access to, for mining purposes, without obtaining a licence under the Rights in Water and Irrigation Act, it is more likely that such a licence will be required.

In most mining areas of Western Australia, surface water is in very limited supply. It would be foolhardy to seek to establish a mining operation based only on water collecting in consequence of rains in underground or surface mine workings. The most likely long-term, viable source of water for the mining industry throughout Western Australia lies in naturally occurring underground water sources including artesian basins, water occurring in underground fissures and fractures and the paleochannel system referred to earlier. As all of these waters are 'underground sources of supply, they are subjected to the control of the Rights in Water and Irrigation Act and a licence under that Act is required for their exploitation. It must also be remembered that the water rights conferred by the Mining Act are limited. Water taken in exercise of those rights can only be used for prospecting, exploration or mining conducted on the land from which the water is taken.[24]

EXPLORING FOR WATER

As I have indicated, the most likely source of water supply for modern mining operations in Western Australia and in particular in the Kalgoorlie region is underground water sources. As there are no well-defined artesian basins in the Kalgoorlie region, exploration for water is becoming a significant activity of established miners and successful mineral explorers wishing to proceed to a mining activity. What licences or authorities are required to be held in order that a person might explore for water whether on ground already held by that person or on other ground?

22 I consider that underground workings constitute an excavation for the purposes of the rights conferred by ss. 48, 66 and 85(1) of the Mining Act. Whether any licence is required under the Rights in Water and Irrigation Act depends on whether the mine workings are a well. Once fitted with pumps, *etc.* to raise water to the surface they probably are.

23 See n.9.

24 Mining Act, ss.48, 66 and 85(1).

In relation to underground water, the controls under the Rights in Water and Irrigation Act are confined to the commencement, construction, enlargement and operation of artesian and non-artesian wells.[25] As a matter of ordinary English usage it would seem at least arguable that drilling a hole in search of water does not of itself constitute the commencement of or construction of a well. There is some support for this assertion in the Mining Act itself which, in conferring rights in respect of water on the holders of mining tenements, authorises the sinking of 'bores or wells'.[26] The Mining Act suggests a distinction between a bore or well and the Rights in Water and Irrigation Act uses only the expression 'well'. It seems to me at least arguable and I would suggest strongly arguable that an exploration programme in search of water (involving the drilling of boreholes) could be conducted pursuant to any of the forms of title available under the Mining Act which confer the right to 'sink a bore'[27] without the holding of a licence under the Rights in Water and Irrigation Act.

In addition, the Mining Act authorises the grant of a miscellaneous licence called a water licence.[28] Such a licence (which can only be granted subject to the Rights in Water and Irrigation Act) can permit the doing of such acts as are specified in the licence.[29] It seems to me that a water licence, authorising the sinking of bores to explore for water would be a sensible title under which to conduct an exploratory programme where the land on which the programme is to be conducted is removed from that on which the mining operation is conducted or is proposed to be conducted.

The Water Authority clearly does not accede to any distinction between a bore and well (as, in most of its correspondence which I have seen the Authority uses the expression 'bore' as if it were synonymous with 'well'.) It is also clear that the Water Authority holds the view that exploration for water is an activity requiring the holding of a licence under the Rights in Water and Irrigation Act.

The commonly adopted procedure in Western Australia for exploring for water is as in four steps. First, the intending explorer approaches the Water Authority and outlines the area in which he wishes to explore for water, the purpose for which he intends to use any water which may be discovered and his anticipated water usage following that discovery. Secondly, an unofficial private consultative process follows as a result of which the Water Authority, having regard to its information regarding available water sources in the area and regarding water usage in the area, indicates whether it would be worth the explorer's while to proceed with the explorer's proposal. Thirdly, the explorer then satisfies the Water Authority that he has access to the area which he wishes to explore. The Water Authority is satisfied with a letter of consent from the owner or occupier of that land or with any form of mining tenement held by the explorer over the relevant area. The Water Authority is indeed satisfied

25 Rights in Water and Irrigation Act, ss.26A and 26B.
26 Mining Act, ss.48, 66 and 85(1).
27 Prospecting licences, exploration licences or mining leases.
28 Mining Act, s.91(1)(g).
29 *Ibid.*, s.91(2).

with a consent from the holder of any mining tenement. Finally, an application is made for a licence pursuant to section 26(D) of the Rights in Water and Irrigation Act. The form of application used is a corruption of the prescribed form of application for a licence to construct an artesian or non-artesian well. The prescribed form allows for three alternatives for specifying the nature of the proposed work. These are 'sink a new well', 'draw water from an existing well' and 'enlarge and deepen an existing well'. The corrupted form has a fourth alternative added, namely 'carry out exploratory drilling'. The form of licence issued is the form prescribed for the purposes of section 26(D) of the Rights in Water and Irrigation Act but (without legislative or regulatory support) the licence is expressed to be for 'exploration drilling only'.

In granting one of these strange licences, it is common for the Water Authority to draw attention to the fact that the licence gives no right to take any water which may be found. The following is an extract from a Water Authority letter accompanying the grant of a licence for exploration purposes:

> This licence is for exploratory purposes only and before any bore can be equipped for production, a new application must be submitted supported by a hydrogeologist's report which should clearly demonstrate that your draw will not affect water availability to other users. You will also need to demonstrate that you will be employing methods in your process to minimise your water requirements.

Following the successful completion of an exploration programme an application is generally made for a licence to construct a particular well or wells and for a licence to take water from that well or those wells. At the same time an application is usually made for a water licence under the provisions of the Mining Act covering the area in which the well or wells will be constructed.

In my view this established procedure for the conduct of exploration for water is without legislative basis and involves the Water Authority in an area in which it has no need to become involved. The Water Authority can quite clearly have its say when water has been discovered and it is proposed to construct a well and draw water therefrom. Presumably it is a refusal to distinguish between a drill or bore hole for exploratory purposes and a well which has led the Water Authority to become involved in the area of water exploration. It has done so notwithstanding the obvious need to alter the prescribed forms of application and licence in order to accommodate their use in relation to exploration. It may be that the Water Authority sees an involvement in the control of water exploration as essential for the gathering of information regarding the availability of water. I believe information gathering could as easily be dealt with by proper liaison between the Mines Department and the Water Authority. Under the Mining Act regulations may be made requiring holders of mining tenements to report to the Mines Department on water encountered in exploration procedures and on the results of bore holes drilled in the pursuit of water.[31]

While water is principally administered by the Water Authority under the Rights in Water and Irrigation Act there is an obvious practical

31 Mining Act, s.162(2)(m).

benefit in a consultative process between explorers and the Water Authority if only to give the explorer some comfort that should he find water he may be allowed to exploit it. That does not in my view justify a licensing system which lacks a legislative basis and in any event, seems unnecessary.

In the principal paper, Michael Crommelin and Rosemary Hunter consider the adequacy of mining tenements as a form of tenure sufficient to support an application for a licence under the Rights in Water and Irrigation Act.[32] This issue is of some significance in relation to the established procedures for water exploration. It is the practice of the Water Authority to accept all forms of mining tenement as a sufficient right to occupancy to enable a grant of a groundwater licence for exploration purposes.[33] It is also the practice of the Water Authority to accept a letter of consent from the holder of any mining tenement as a sufficient right to occupancy for the person in whose favour the consent is given to be granted a groundwater licence for exploration purposes. There must be considerable doubt whether a mere letter of consent (particularly if issued by the holder of a mining tenement) gives any right of occupancy let alone a sufficient right of occupancy to support a licence. It is also doubtful whether a prospecting licence or exploration licence in law confers any right to occupancy such as would be sufficient to support the grant of a licence under the Rights in Water and Irrigation Act to drill for water.

I am inclined to the view that these considerations may well be considerations of legal nicety. Having consented to the conduct of an exploration programme, the owner or occupier of land would, I submit, have no standing to complain. The rights in respect of water conferred under the Mining Act on the holder of a mining tenement (regardless of the validity of any licence granted under the Rights in Water and Irrigation Act) are likely to be a good defence to any objection to the conduct of the drilling programme by any other person having rights over the same land. I doubt that the Water Authority is ever likely to challenge the validity of its established practices in the area of water exploration.

LAND TENURE AND WATER USAGE

The holding of a licence under the Rights in Water and Irrigation Act to construct or draw water from an artesian or non-artesian well simply means that the person constructing the well or drawing water from the well commits no offence under the Rights in Water and Irrigation Act by doing so.[34] The Rights in Water and Irrigation Act confers no proprietary right on the holder of the licence to enter on or remain on land for the purposes of constructing a well, no ownership rights in respect of a well constructed and, as I read it, no ownership to the water which may be drawn from the well.

In order to enter on land to construct and operate a well and to take water from that well for mining purposes one not only needs a licence

32 Crommelin and Hunter, near n.38.
33 'Groundwater licence' is the name by which a licence under s.26D of the Rights in Water and Irrigation Act is generally known.
34 Rights in Water and Irrigation Act, s.26D(3).

under the Rights in Water and Irrigation Act (to ensure one commits no offence under that Act) but also needs some suitable form of land tenure which of itself confers those rights which the Rights in Water and Irrigation Act does not confer. The question becomes what kind of tenure is appropriate. The kinds which a miner would most likely be drawn to are those obtainable under the Mining Act — prospecting and exploration licences, mining leases or miscellaneous licences.

Where the mining operation is to be conducted on the same ground as that from which the water is to be obtained, it is most likely that land tenure will be secured by a mining lease. Where, however, the water source is remote from the mine site, the choice is not so clear. First there is the technical question whether the holding of a licence under the Rights in Water and Irrigation Act (entitling the sinking of a well and the drawing of water from that well) overcomes the limits on the water rights conferred by Mining Act titles (namely to use of water for purposes of prospecting or exploration or mining conducted on the land to which the particular title relates).[35] In my view this technical question is likely to be resolved on the basis that the Mining Act limitations remain operative so that land tenures to support a Rights in Water and Irrigation Act licence in respect of a remote water source would need to be other than by way of exploration or prospecting licence or by mining lease.

In any event, in practical terms a miner would be unwise to seek to protect a remote water source with a prospecting or exploration licence or a mining lease. Exploration and prospecting licences are of limited duration, they carry expenditure and work obligations which can only be satisfied by the conduct of exploration or prospecting for minerals.[36] Mining leases also impose work and expenditure obligations and are generally expensive titles to hold.[37] Moreover, it is doubtful one could be obtained merely to protect a well or series of wells unless a legitimate mining operation were planned for the same ground.

The most likely title which a miner would use to protect a well or series of wells is a water licence under the Mining Act.[38] Water licences are granted for a five-year term,[39] they are renewable[40] and may authorise the holder to do such matters and things as are specified in the licence.[41] Water licences may be granted over land which is already the subject matter of another mining tenement.[42] It is true that any person could object to the granting of a water licence,[43] but it is now reasonably well established that to succeed an objection must concern the application

35 Mining Act, ss.48, 66 and 85(1).
36 Mining Regulations 1981, regs. 15 (prospecting licences) and 21 (exploration licences).
37 *Ibid.*, reg. 31.
38 Mining Act, s.91.
39 *Ibid.*, s.91(2).
40 *Ibid.*, s.91(2).
41 *Ibid.*, s.91(2).
42 *Ibid.*, s.91(1).
43 *Ibid.*, s.92 (incorporating s. 42 by reference).

process itself. I do not believe that an objection could succeed if it was based on a competing need or potential need for water.[44]

Another form of land tenure which a licensee under the Rights in Water and Irrigation Act might consider is a special lease under the provisions of the Land Act 1933.[45] The Land Act empowers the Minister for Lands to grant special leases for a range of purposes which include the working of artesian wells, and the taking and using of water for mining purposes. One attraction of a special lease is that it may be granted for a term of up to 50 years.[46] On the other hand, to obtain a special lease would involve dealing with yet another set of legislation, another minister and another department. A special lease under the Land Act can of course only be granted over Crown land. It is not clear whether a special lease could be granted over land which is already the subject of a mining tenement. I am inclined to the view that one could be granted over land held under any form of mining tenement including a mining lease because the rights conferred by mining tenements do not include the right to exclusive possession or occupancy of the land covered by the mining tenement. Only mining leases confer any degree of exclusivity and that exclusivity is confined to mining purposes.[47] The grant of rights of occupancy for other purposes does not appear to be precluded by the Mining Act. I am not aware of any miner having used a special lease under the Land Act to secure tenure to the land on which he wishes to (and is licensed to under the Rights in Water and Irrigation Act) construct and operate a well or wells. Nevertheless I think the use of such licences merits further consideration and investigation.

In the principal paper the authors have dealt with the issue of land tenure in a different way. They have suggested that a form of tenure amounting to legal ownership or a legal right of occupancy is a prerequisite to eligibility to seek a licence under the Rights in Water and Irrigation Act.[48] This is so in respect of licences relating to surface waters, as section 13 expressly only empowers the Water Authority to grant a licence to an owner or occupier of land. The authors of the principal paper have suggested that the holder of a mining lease probably is, but the holder of an exploration licence or prospecting licence probably is not, an occupier for the purposes of section 13 of the Rights in Water and Irrigation Act. As I have indicated earlier it would be rare for a mine in Western Australia to be located in the vicinity of a sufficient and permanent supply of surface water; this issue is not likely to be of much practical significance. The powers conferred on the Water Authority to grant licences in respect of artesian or non-artesian wells[49] (that is in relation to underground water) are not limited to the grant of such licences to owners or

44 *Tortola Pty. Ltd. v. Saladar Pty. Ltd. and Holloway* [1985] WAR 195, 205; *In the matter of Application for Miscellaneous Licence 15/52 by Pan Australia Mining Limited v. Resman* unreported, 6/8, Coolgardie Warden's Court, 31 March 1988.

45 Land Act 1933, s.116.

46 *Ibid.*, s.116.

47 Mining Act, s.85(3).

48 Crommelin and Hunter, near n.38.

49 Rights in Water and Irrigation Act, ss.26A, 26B and 26D.

occupiers. Consequently it seems to me that a licence in respect of underground water could not be impeached on the grounds that the applicant was not the owner or occupier of the land to which the licence related.

Under section 26D(3) of the Rights in Water and Irrigation Act, a licence in respect of an artesian or non-artesian well is deemed to be held by and operates for the benefit of the lawful owner and the occupier for the time being of the land on which the well is sunk or is proposed to be sunk. This section does not in my view operate to invalidate a licence granted to a non-owner or occupier. Such a licence held by the holder of an exploration or prospecting licence (even if such a holder is not an occupier) would in my view enable the holder to exercise the water rights conferred by his exploration or prospecting licence[50] without risking prosecution for contravention of the Rights in Water and Irrigation Act.[51]

Section 26D(3) may be the root of other problems. For example, it would appear to entitle the owner of private land on which a well is sunk by the holder of a mining tenement over the same land to claim to have the right to draw water from that well. Certainly the owner could do so with immunity from prosecution under the Rights in Water and Irrigation Act. I presume that once a well is sunk it is a fixture, title to which runs with the land. I wonder therefore whether the miner has any right to prevent the land owner drawing water from the miner's well. There is a subject for further consideration at a later time.

MORE ABOUT WATER LICENCES

I have suggested that exploration for water would best be undertaken pursuant to rights conferred by a water licence granted under the Mining Act[52] (noting of course that the Water Authority takes a different view). I have also suggested that a water licence is a suitable form of tenure to enable the holder of a licence under the Rights in Water and Irrigation Act to establish and operate a well to provide water for a remote mining operation. It is interesting to consider whether a water licence could be utilised as a means of sterilising groundwater from access by others or as a means of obtaining access to water entirely independently of the Rights in Water and Irrigation Act.

If one were to obtain a water licence over an area prospective for underground water then it would evidently be very difficult for anyone else wishing to access that water to obtain an appropriate form of land tenure with which to support a licence under the Rights in Water and Irrigation Act. In *Pan Australia Mining Limited v. Resman*[53] this very issue fell to be considered by the warden. An objection to the grant of a water licence was made on the grounds that:

1. the land the subject matter of the proposed water licence covered a prospective water source within the area of the objector's exploration licence;

50 That is the rights conferred by the Mining Act, ss.48(d) and 66(d).
51 Rights in Water and Irrigation Act, ss.26A or 26B.
52 Mining Act, s.91.
53 See n.44 above.

2. the granting of the water licence would sterilise the ground concerned preventing the objector obtaining access to water within that ground; and
3. the applicant for water licence did not hold a licence under the Rights in Water and Irrigation Act.

The objector failed and in reaching his decision the warden ruled that it was not a prerequisite to the grant of an application for a water licence that a licence under the Rights in Water and Irrigation Act be held. This decision, in my view, opens the way to the use of water licences as a means of sterilising available underground water resources. If potential competing users cannot obtain adequate land tenures to support a licence under the Rights in Water and Irrigation Act the policy of that Act (to ensure a fair distribution of available water amongst all persons having a need for water) may well be frustrated.

If a water licence can be granted to a person who does not hold a licence under the Rights in Water and Irrigation Act (which appears to be the case) the question arises whether such a licence could be used to take water without obtaining a licence under the Rights in Water and Irrigation Act. The Mining Act states that the power to grant a water licence (not the rights conferred thereby) is subject to the Rights in Water and Irrigation Act. That Act imposes no controls on the granting of licences under other Acts (in fact it acknowledges that water may be appropriated under other Acts).[54] On the face of it therefore, water licences could be utilised to circumvent the apparent legislative intent that access to water is a matter to be controlled by the Water Authority. The solution may well lie in the decision in *Garbin v. Wild.*[55] It seems to me likely that the general provisions of the Mining Act in relation to water licences will (in the same way as the general provisions of the Land Act concerning rights to water) yield to the special provisions of the Rights in Water and Irrigation Act (regardless of the drafting of the Mining Act being defective in terms of subjecting a water licence to the Rights in Water and Irrigation Act).

MISCELLANEOUS ISSUES

Renewal

The Mining Act contains provisions for renewal of titles granted under it.[56] The Rights in Water and Irrigation Act contains no provisions for renewal of licences relating to underground water.[57] When a licence concerning an artesian or non-artesian well held under the Rights in Water and Irrigation Act expires, it is necessary for a new application to be made. At that time the Water Authority may have regard to changed circumstances effecting demand for water and as a result may reduce the

54 Rights in Water and Irrigation Act, s.26.
55 [1965] WAR 72.
56 Mining Act, ss.45(3) (prospecting licences), s.61(2) (exploration licences), s.78(2) (mining leases), s.91(2) (water licences).
57 Rights in Water and Irrigation Act, s.13 provides in respect of surface water licences 'and may from time to time thereafter renew any licence so granted'. No similar words appear in ss.26A, 26B or 26D.

quantity of water to which a licence holder is entitled upon the grant of a subsequent licence. This potential must surely be of concern to a miner who has established a major mining operation in connection with which a certain level of water usage is essential.

Objection Procedures

Although it may be that objections to applications for mining tenements are of limited scope (in that only issues directed towards the application process can be considered by the warden), in practical terms the existence of the opportunity to object often leads to a commercial settlement. There are no procedures under the Rights in Water and Irrigation Act for persons having competing uses for water to object to any licence being granted. Rather they must rely upon the performance by the Water Authority of its statutory function which includes (to quote the Water Authority's own words) 'to allocate the available ground water resources fairly and protect users').[58]

Transferability

In general terms mining tenements are transferable. Licences granted under the Rights in Water and Irrigation Act are not expressly transferable. As we have seen, section 26D(3)[59] provides that licences issued under section 26A or 26B (for artesian and non-artesian wells) are deemed to be held by and operate for the benefit of the lawful owner and the occupier 'for the time being' of the land whereon the well is sunk or is proposed to be sunk. If 'for the time being' connotes 'from time to time' then the transfer to a new owner of the title by which a licensee under the Rights in Water and Irrigation Act secures tenure to the land concerned would carry with it the benefit of the licence held under the Rights in Water and Irrigation Act. I will leave it to others to consider and opine on this issue. Suffice it to say that I understand the Water Authority considers that a new owner must obtain its own fresh licence under the Rights in Water and Irrigation Act. Clearly this presents a difficulty for a purchaser of a mining operation as the Water Authority could alter the terms or conditions of a licence upon the purchaser's application for a fresh licence.

CONCLUSION

There can be no doubt that the implications of the title to the primary paper are justified. In legal terms there is evidently much conflict in the controls of mining and water. Many interesting legal questions can be raised concerning the interrelationship of the legislation controlling these two areas and concerning the validity of the manner in which the legislation is administered. In the end analysis, miners have the capacity to

58 Water Authority circular reference no. 01285.
59 Rights in Water and Irrigation Act.

live with adversity, risk and uncertainty. In practical terms what they hate the most is the necessity to deal with diverse arms of government motivated by diverse policy issues and the administrative nuisance and duplication of cost which results. Not unreasonably a miner could be excused for thinking that in spite of his substantial contribution to the economy of the nation and the State, his activities are destined to create considerable employment in the public sector at a hefty financial impost on his own activities.