

A CONCEPTUAL COMPARISON BETWEEN UNITISATION UNDER AUSTRALIAN PETROLEUM LEGISLATION AND COORDINATION UNDER THE PETROLEUM AND GAS (PRODUCTION AND SAFETY) ACT 2004 (QLD)

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When Queensland's coal seam gas regime ("CSG regime") commenced on 1 January 2005, it required the negotiation and maintenance of a coordination arrangement where there was an overlapping mining lease ("ML") and petroleum lease ("PL"). The concept of a coordination arrangement was, according to the department administering the legislation, based on the concept of unitisation under Australian petroleum legislation. In fact the legislature regarded the concepts as so similar that a unitisation agreement under the Petroleum Act is now taken to be a coordination arrangement. This paper analyses that supposed similarity and concludes that whilst there are some similarities, key differences such as the nature of the commodities involved, the intended relationship between the parties and the scope of the activities to which the arrangement applies, result in two very distinct types of arrangements.

1. UNITISATION UNDER AUSTRALIAN PETROLEUM LEGISLATION

'The oil and gas reservoir is a unit by nature and to get the best results it should be operated as a unit, that is, as if it were one lease'.¹ There are various provisions in both offshore and onshore petroleum legislation in Australia to facilitate the operation of petroleum reservoirs as a unit.^{2 3} These provisions allow for, or require, cooperative arrangements with respect to recovery of petroleum from a 'petroleum pool that is partly in a particular licence area ... and partly in a licence area of another licensee'.⁴ These arrangements are usually set out in agreements known as unitisation or unit development agreements.⁵ 'By virtue of the unitisation agreement, the licensees or contractors concerned become participants in the exploitation of the unit, in the same way as they would had the unit been covered by a single jointly owned licence or contract'.⁶

The concept of unitisation for petroleum first arose in the United States where largely because of the common law rule of capture,⁷ it became necessary for regulatory authorities to encourage, and

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¹ Raymond Myers, *The Law of Pooling and Unitization: Voluntary, Compulsory* (1973) 378.

² With respect to onshore provisions, see for example *Petroleum Act 1967* (WA) s 69, *Petroleum Act 1998* (Vic) s 79 and *Petroleum Act 1923* (Qld) s 102. With respect to offshore provisions, see for example *Petroleum (Submerged Lands) Act 1967* (Cth) s 59, *Petroleum (Submerged Lands) Act 1982* (WA) s 59, *Petroleum (Submerged Lands) Act 1982* (Vic) s 59, *Petroleum (Submerged Lands) Act 1982* (SA) s 58, *Petroleum (Submerged Lands) Act 1982* (Tas) s 58, *Petroleum (Submerged Lands) Act 1982* (NSW) s 60 and *Petroleum (Submerged Lands) Act 1982* (Qld) s 59. The Offshore Petroleum Bill 2005 that is intended to replace the *Petroleum (Submerged Lands) Act 1967* (Cth) also deals with unitisation at s 163.

³ This paper will focus on unitisation of a petroleum pool where that petroleum pool lies wholly within one jurisdiction. A discussion of unitisation of a petroleum pool where that petroleum pool straddles two jurisdictions is beyond the scope of this paper.

⁴ *Petroleum (Submerged Lands) Act 1967* (Cth) s 59.

⁵ For consistency, such agreements will be referred to in this paper as unitisation agreements.

⁶ Bernard Taverne, *Co-operative Agreements in the Extractive Petroleum Industry* (1996) 19.

⁷ A discussion of the rule of capture and its status in Australia is beyond the scope of this paper.

in some cases enforce, the joint development of a petroleum pool which straddled the boundaries of licences held by different parties.⁸ Without joint development and due to the migratory nature of petroleum within a pool, licence holders had the ability to extract both petroleum from within the licence area and petroleum that might flow into the licence area from adjoining licences. This situation resulted in licence holders drilling an excess of wells in an attempt to extract petroleum from the pool before their neighbour did so. Unrestrained, such activity decreased overall production from a petroleum pool by half to a fifth.⁹ To realise the real significance of unitisation of a petroleum pool, 'it must be appreciated that an oil pool is a highly complex energy mechanism, capable of desirable and undesirable responses depending on how it is handled. The artificial property lines man has drawn upon these pools ... makes virtually impossible maximum ultimate recovery in the absence of unitization'¹⁰. 'With so much at stake, oil firms ... [were] motivated to reach agreement to form complete units'¹¹ and not surprisingly, '[u]nitization became an increasingly popular alternative response to the common pool by the late 1940s and early 1950s'.¹²

In Australia, there are two ways by which a petroleum pool can be unitised. Firstly, the holder of a petroleum licence may voluntarily enter into a written agreement with the holder of another petroleum licence for the unitisation of a petroleum pool that underlies their respective licences.¹³ That agreement, whilst subject to the usual requirements under Australian petroleum legislation with respect to the approval and registration of dealings,¹⁴ can otherwise be on such terms as agreed by the parties.

Alternatively the relevant authority¹⁵ may require that licensees enter into a unitisation agreement with respect to a common petroleum pool, in order to achieve more effective recovery of petroleum from that pool.¹⁶ Such a direction can be made of the authority's own volition or as the result of a request from a licence holder or a person who is entitled to carry on operations for recovery of petroleum in an area that includes a part of the particular petroleum pool. In the event that the licensees are unable to agree on the required unitisation agreement, the authority has the

⁸ The idea of joint development of a common resource straddling property boundaries was not peculiar to the United States and as far back as 1899, the case of *Trinidad Asphalt Co v Ambard* [1899] AC 594 suggested that common development in these situations might be both beneficial and necessary.

⁹ Gary Libecap, *Contracting for Property Rights* (1999) University of Arizona http://www.econ.arizona.edu/downloads/working_papers/anderson3s.pdf at 1 July 2005.

¹⁰ Andrew Derman, 'Unitization' (2003) *Findlaw for Legal Professionals* <http://library.findlaw.com/2003/Jan/30/132512.html> at 5 May 2005.

¹¹ Libecap, above n 9.

¹² Gary Libecap and James Smith, *The Economic Evolution of Petroleum Property Rights in the United States* (2002) International Centre for Economic Research <http://www.icer.it/docs/wp2002/libecap25-02.pdf> at 28 April 2005.

¹³ See for example *Petroleum (Submerged Lands) Act 1967* (Cth) s 59(2), *Petroleum (Submerged Lands) Act 1982* (NSW) s 60(2), *Petroleum (Submerged Lands) Act 1982* (NT) s 59(2), *Petroleum (Submerged Lands) Act 1982* (Qld) s 59(2), *Petroleum (Submerged Lands) Act 1982* (SA) s 58(2), *Petroleum (Submerged Lands) Act 1982* (Tas) s 58(2), *Petroleum (Submerged Lands) Act 1982* (Vic) s 59(2) and *Petroleum (Submerged Lands) Act 1982* (WA) s 59(2).

¹⁴ See for example *Petroleum (Submerged Lands) Act 1967* (Cth) s 81.

¹⁵ The relevant regulatory authority would ordinarily be the Joint Authority with respect to Commonwealth adjacent areas or the relevant Minister with respect to State areas.

¹⁶ *Petroleum (Submerged Lands) Act 1967* (Cth) s 59(3); *Petroleum (Submerged Lands) Act 1981* (NT) s 59(3); *Petroleum (Submerged Lands) Act 1982* (NSW) s 60(3); *Petroleum (Submerged Lands) Act 1982* (Qld) s 59(3); *Petroleum (Submerged Lands) Act 1982* (SA) s 58(3); *Petroleum (Submerged Lands) Act 1982* (Tas) s 58(3); *Petroleum (Submerged Lands) Act 1982* (Vic) s 59(3); *Petroleum (Submerged Lands) Act 1982* (WA) s 59(3).

power to direct the licensees to submit a scheme for unitisation of the relevant pool and may then impose one such scheme on all of the holders of licences over the common pool. In practice, the author is unaware of any unitisation scheme having been imposed by the relevant authorities in Australia although the relevant authorities have on occasion threatened such action.¹⁷

Notwithstanding the clear benefits of unitisation, '[c]omplete unitization is much more limited than one would expect.'¹⁸ There are surprisingly few unitisation agreements in place in Australia although this is perhaps a result of the significant size of most petroleum tenements and the correspondingly 'small number of cross-boundary accumulations [of petroleum,]... rather than reluctance to apply the tool of unitisations'.¹⁹

2. COORDINATION ARRANGEMENTS UNDER THE CSG REGIME

The Queensland government has long recognised that that there are 'overlapping coal and petroleum tenures covering most of the coal measures throughout Queensland'.²⁰ In an effort to deal with issues associated with overlapping coal and petroleum tenements, the CSG regime²¹ was enacted in Queensland in late 2004. A key component of the CSG regime was the requirement for a coordination arrangement to be entered into, and kept in place, where there is an overlap between an ML and a PL.^{22 23} The coordination arrangement is intended to be an agreement between the holder of the ML and the holder of the PL to allow for the ordered production of both petroleum and coal within the area of overlap.

Entry into a coordination arrangement is espoused as being voluntary.²⁴ However, if there is a granted production tenement for one commodity, say petroleum, and a coordination arrangement is unable to be negotiated with the holder of that PL, any application for an ML over part of the same geographical area will not be approved.²⁵ This, rightly or wrongly,²⁶ puts the holder of the granted

¹⁷ For example, the Australian-Indonesia Joint Authority (as it then was) threatened to impose unitisation on the Bayu-Undan field because it believed that the terms negotiated by the parties themselves were unacceptable. The matter was subsequently resolved without the Authority imposing unitisation.

¹⁸ Libecap, above n 9.

¹⁹ Jean Matthews, 'Unitisation' (1991) *AMPLA Yearbook* 462, 480.

²⁰ Queensland Department of Mines and Energy, 'A New Coal Seam Gas Regime for Queensland – A final position paper proposing anew administrative and legislative framework for coal seam gas explorers and developers and coal explorers and miners' (November 1997) 1.

²¹ A reference to the CSG regime is a reference to the *Petroleum and Gas (Production and Safety) Act 2004* (Qld) ('P&G Act'), the *Petroleum and Other Legislation Amendment Act 2004* (Qld) ('POLA Act') and to the amendments to the *Mineral Resources Act 1989* (Qld) ('MRA') and the *Petroleum Act 1923* (Qld) ('Petroleum Act') that were enacted as part of the enactment of the P&G Act and the POLA Act.

²² *Mineral Resources Act 1989* (Qld) ss 318CB, 318CT; *Petroleum and Gas (Production and Safety) Act 2004* (Qld) ss 121, 365.

²³ The CSG regime only requires that a coordination arrangement be in place for overlapping production tenements and whilst there are other provisions of the CSG regime that apply in the event of overlapping exploration tenements, there is no obligation for holders of overlapping exploration tenements to use reasonable attempts to agree a coordination arrangement. The commercial reality is that the negotiation of these arrangements often takes place even where there are only overlapping exploration tenements on the basis that overlapping production tenements might be granted in the future.

²⁴ Department of Natural Resources and Mines, 'A New Coal Seam Gas Regime for Queensland: Policy Framework' (November 2002), 1, 12.

²⁵ See for example *Mineral Resources Act 1989* (Qld) s 318CB(2).

²⁶ In the author's opinion, this position would be fair if the requirements for the grant of an ML and a PL were comparable. In the author's experience, this is not the case because the time, expenditure and level

production tenement in a very strong position. Fortunately the holder of a production tenement has an obligation under the terms of its tenement to use reasonable attempts²⁷ to negotiate with a subsequent applicant for an overlapping production tenement, with a view to agreeing a coordination arrangement.²⁸

The negotiation of a coordination arrangement may also become a necessity for an overlapping ML and PL, both granted prior to the commencement of the CSG regime, where one of the holders seeks to assign or sublet part, or all, of their tenement.²⁹

Where a coordination arrangement is reached, that coordination arrangement must remain in place for the term of the tenements in the overlap area and where it ceases, both parties must immediately cease all activities that would otherwise be authorised under the terms of their tenement.³⁰ As with unitisation agreements under Australian petroleum legislation, coordination arrangements also require approval by the relevant Minister.³¹

Given that the legislation requiring the entry into coordination arrangements only became effective at the start of this year, there are very few coordination arrangements actually in place in Queensland. There are however a significant number of coal and petroleum tenements in Queensland for which such an arrangement will be required at some point in the life of those tenements. As a result, there is likely to be a significant number of coordination arrangements entered into going forward.

3. A COMPARISON: UNITISATION AGREEMENTS AND COORDINATION ARRANGEMENTS

In Australia both unitisation agreements and coordination arrangements are an attempt by the legislature to ensure production of valuable and finite resources occurs 'at the locations and rates it is most efficient...without disruption of the scheme by the legal rights [inherent] ... in competing properties'.³² Essentially both types of arrangement seek to maximise recovery of the commodities to which they relate and to outline the cooperative arrangements that will be necessary in order to achieve that aim.

Notwithstanding those basic similarities, there are important differences between the two types of arrangements. Such differences are not particularly surprising given that they derive from the different commodities to which the arrangements relate, the distinct relationships between the parties when such arrangements are agreed and the variation in the scope of activities that the arrangements seek to regulate.

of detail required to achieve the grant of an ML is frequently more onerous than that required to obtain the grant of a PL.

²⁷ It is unclear how the courts will interpret this obligation. Whilst it is possible the courts will interpret this obligation as akin to an obligation to negotiate in good faith, it seems unlikely the holder of a production tenement could be coerced into an agreement, particularly in light of s 318CA(2) of the *Mineral Resources Act 1989* (Qld).

²⁸ *Mineral Resources Act 1989* (Qld) s 318CB(2) and s 318CA; *Petroleum and Gas (Production and Safety) Act 2004* (Qld) s 349.

²⁹ See for example *Mineral Resources Act 1989* (Qld) s 318DO.

³⁰ See for example *Mineral Resources Act 1989* (Qld) s 318CT(2).

³¹ See for example *Mineral Resources Act 1989* (Qld) s 318CB(1)(b).

³² Derman, above n 10.

3.1 Commodity Based Differences

There are obvious differences between unitisation agreements and coordination arrangements that derive from the fact that unitisation agreements deal only with the production of petroleum and coordination arrangements deal with the production of both petroleum (in the form of coal seam gas)³³ and coal. Put simply, petroleum and coal have substantially different qualities. For example, 'petroleum is migratory in a way that, say, coal is not'.³⁴ Petroleum is often found in a pool whereas coal ordinarily runs in seams. Petroleum and coal also have considerably different, and fluctuating, respective values and have historically been dealt with under separate legislative arrangements. It has in fact been said that 'the oil industry and the various branches of the hard mineral industry [are]...organised so differently with a different order of priorities that any agreement which [manages]...to meet the requirements of both sides of the industry would be of such generality as to be a small practical utility to either'.³⁵ Nonetheless the CSG regime requires that such arrangements be agreed and consequently, addressing misunderstandings based on basic differences between coal and coal seam gas is a key element if a coordination arrangement is to be negotiated and executed expeditiously. It should be noted for completeness that petroleum is by no means homogenous and where a petroleum pool involves various types of petroleum, similar challenges are likely to arise in the negotiation of a unitisation agreement³⁶ although, in the author's opinion, to a much lesser extent.

The aim of the unitisation agreement is to have that agreement based around a single petroleum pool regardless of how many petroleum licences might overlay that particular pool. The situation under the CSG regime is a little different. The area covered by a PL is often many times larger than the area covered by an ML. Consequently, a single coal seam from which the holder of the PL wishes to extract coal seam gas might straddle MLs held by a number of different parties. Rather than seeking a single coordination arrangement to cover the extraction of coal seam gas from the entire seam, in practice, negotiations for a coordination arrangement are confined to dealing with the overlap between the production tenements held by a single coal seam gas producer and a single coal producer. As a result there may be several coordination arrangements for production of coal seam gas from one particular coal seam. Each of those coordination arrangements, whilst likely to be largely standard, will also have its peculiarities. Hence, a key difference between unitisation agreements and coordination arrangements is the fact that unitisation agreements relate to a particular petroleum pool whilst coordination arrangements tend to be on a tenement-by-tenement basis.

It has been said with respect to unitisation that '[I]t is only through unit operation of a common source of supply that individual property rights can be fully protected'.³⁷ Similar could be said with respect to coordination under the CSG regime for without some form of coordination between the rights of the holder of an ML and the rights of a holder of a PL, the individual property rights of each with respect to their own particular commodity cannot be fully protected. Where a petroleum pool underlies several petroleum licences 'numerous operators have the right to

³³ Coal seam gas is regarded as being petroleum. *Petroleum and Gas (Production and Safety) Act 2004* (Qld) s 10; *Mineral Resources Act 1989* (Qld) pt 7AA, div 8, sub-s 1.

³⁴ Matthews, above n 19, 463.

³⁵ Maurice Bathurst, Hazel Fox, Paul McDade, Derek Reid, Anastasia Strati and Peter Huey, *Joint Development of Offshore Oil and Gas* (1989) 12.

³⁶ Myers, above n 1, 76.

³⁷ Committee of the Section of Mineral Law, 'Conservation of Oil and Gas, A Legal History' (American Bar Association, 1948).

withdraw from a common source of supply.’³⁸ In comparison, under the CSG regime, although there is more than one operator with the right to withdraw a commodity, there is not as such a common source of supply in that both operators seek to obtain different commodities from the same geographical area. This situation is complicated further by the fact that although coal and coal seam gas are different commodities, they can be found in the same coal bed such that one cannot be extracted without in some way affecting the other.

Regardless of whether the relevant cooperative arrangements are in the form of a unitisation agreement or a coordination arrangement, there will be robust negotiations where there is a variation between the values of commodities involved. ‘[D]ivergent beliefs regarding relative prices could foreclose the possibility of [agreement] ... and lead instead to separate partitioned ownership of the two resources’.³⁹ That issue gains particular significance in the CSG regime where, unless there is eventual agreement between the parties, production of both commodities will not take place.⁴⁰ In other words, disagreements over relative values will lead to an inability for at least one producer to produce its respective commodity. This is compounded by the fact that negotiation of a coordination arrangement frequently centres on each party attempting to maximise the *amount* of their particular commodity that can be extracted from the overlap area. Negotiations rarely deal with maximising the overall *value* extracted from the entire overlap area. In the author’s experience, maximising the amount of the two commodities that are extracted from the area is in many cases inconsistent with maximising the overall value of what is extracted from the overlap area. It is unfortunate that the CSG regime does not address this issue given the considerable difference in the relative values of the commodities being extracted and the potential loss of royalty income to the State as a result. Where there was sufficient commercial imperative, it is possible that a coordination arrangement could result in coal and a CSG producer viewing the overlap area as an economic unit to which each would share some part of, or at least some royalty with respect to, the total product of both coal and CSG from the area. There are however likely to be inherent difficulties with such an arrangement due to the often significant differences in the size, financial backing and business models of coal and CSG producers.

The legislative landscape for production of petroleum and coal is also quite different because these commodities have traditionally been regarded as distinct. Prior to the introduction of the CSG regime in Queensland, the production of petroleum was largely dealt with under the *Petroleum Act* and the production of coal was primarily dealt with under the MRA. Now that the CSG regime has commenced, some challenging interactions arise between the *Petroleum Act*, MRA, P&G Act and POLA Act that derive from the disparate legislative approaches to the two commodities. In the author’s experience, similar issues arise in each State of Australia in which there are overlapping coal and coal seam gas resources. A discussion of those challenges is beyond the scope of this paper. Suffice to say, those challenges are reflected in the often difficult negotiation process for a coordination arrangement in a way that would not be the case if there were only petroleum tenements granted in a geographical area, as would be the case under unitisation.

³⁸ Stuart MacDonald and Gail Kaciuba, *A Decision Theoretic Explanation for the “Irrational” Opposition to Unitization Agreement in the Oil and Gas Industry* Midwestern State University <www.coba.mwsu.edu/~wpaper/FWP/Papers/04125MGkb.pdf> at 28 April 2005.

³⁹ Libecap and Smith, above n 12.

⁴⁰ That situation does not ordinarily arise with respect to unitisation. Subject to a contrary direction by the relevant authority, neighbouring licence holders can choose to continue to extract petroleum from their respective licence areas without undertaking unitisation.

3.2 The Relationship of the Parties

Probably the most significant difference between typical unitisation agreements and coordination arrangements is in terms of the relationship between the parties following entry into those arrangements.

Under a coordination arrangement each holder continues to undertake the extraction of its respective commodity. Neither the product of that extraction nor any profits from production are shared between the coal and coal seam gas producer. In other words the coal seam gas that is extracted belongs to the holder of the PL and the coal that is extracted belongs to the holder of the ML, notwithstanding that there are some contractual arrangements to enable coordination of those activities.

By contrast, unitisation agreements are ordinarily recognised as a specialised form of joint venture.^{41 42} The parties are traditionally put in the 'position of being holders of undivided participating interests in the unit... as if they were joint holders of a single exploitation right governing the unit'.⁴³ As a result the licence holders will own the extracted petroleum as tenants in common, notwithstanding that each of the unitised licences will usually remain in the ownership of the original licence holder. In the context of the United States, it has even been said of unitisation that '[t]he relationship between the participants should be on the same basis as that between joint owners of an oil and gas lease. That relationship has been held to be fiduciary in character and all their dealings with each other required the exercise of the utmost good faith'.⁴⁴

In order to operate the unit area the various licence holders will usually seek to appoint a single operator. Often common plant and infrastructure are also put in place to process the petroleum extracted from the unit area. The operator is also often appointed to sell the petroleum that is extracted from the unit area on behalf of each of the individual licence holders.⁴⁵ Effectively, 'under unitization, the lease loses its production significance ...[and] with a single unit operator and the other lease holders acting as residual profit claimants, there are joint incentives to develop the reservoir in a manner that maximises its economic value over time'.⁴⁶

A unitisation agreement, as a form of joint venture, is a contract not only aimed at increasing the overall production of petroleum from a pool but also aimed at sharing risks between the licence holders. This is not a feature of a coordination arrangement. Under the CSG regime each of the producers retains the usual level of risk or, in many cases, takes on an increased level of risk due to the need to coordinate activities with a third party. The parties to a coordination arrangement are simply required to act in a way that will not disadvantage the other party. Where one party suffers a loss, the other party does not share the burden of that loss unless it can be proved to have caused the loss.

3.3 Scope of the Arrangements

Given the differences that have already been discussed, it is not surprising that the scope of matters covered in coordination arrangements and unitisation agreements varies

⁴¹ Matthews, above n 19, 462.

⁴² Taverne, above n 6, 87.

⁴³ Ibid.

⁴⁴ Myers, above n 1, 397-398.

⁴⁵ This is not always the case, particularly where the licence holders are concerned to avoid any contention that the arrangement is a partnership.

⁴⁶ Libecap, above n 9.

considerably. ‘The unique nature of each ... and the complexity of the individual terms of ...[such] agreements...’⁴⁷ make it difficult to set out a list of the key terms. The other difficulty in undertaking an analysis of the scope of a unitisation agreement and a coordination arrangement is the fact that there are very few unitisation agreements in place within Australia and of those in place, the terms are ordinarily kept confidential between the parties. Similarly, whilst there are likely to be a far larger number of coordination arrangements put in place going forward, there are very few of these agreements currently in place and once again, the confidentiality of the arrangements is usually guarded carefully by the parties.

There is no specific guidance given in Australian petroleum legislation as to the necessary components of the unitisation agreement. ‘Depending [then] as they do on the infinite range of agreements which can be reached [by the parties], voluntary unitization agreements can grow enormously complex.’⁴⁸ Nonetheless the provisions largely reflect the standard provisions of a joint venture agreement and will usually include provisions dealing with the following components:

- (a) an accurate description of the area to be unitised and of the petroleum resource understood to exist in the unit area;
- (b) details of the petroleum operations which are contemplated within the unit area;
- (c) details of the way in which petroleum will be allocated between the various licence holders and, in particular, details of the participation interests of the various licence holders with respect to production from the whole of the unit area;
- (d) provisions dealing with cost allocation between the various licence holders. Such allocation is ordinarily in line with the participation interests of the various licence holders;
- (e) provisions dealing with establishment of a management committee and dealing with decision making between the various licence holders within the unit area;
- (f) appointment of the operator for the unit area;
- (g) details of the process, method and frequency for any redetermination of the participating interests of the licence holders, particularly where more information becomes available with respect to the petroleum resources either in the unit area or connected to the pool to which the unit area relates;⁴⁹
- (h) provisions dealing with assignments of participation interests and tenements to third parties including, ordinarily, pre-emptive rights given to the remaining parties; and
- (i) details of the commencement date and termination events for the unitisation agreement.⁵⁰

As with Australian petroleum legislation, there is limited guidance under the CSG regime with respect to the required contents of a coordination arrangement. In comparison to a unitisation agreement, a coordination arrangement tends to focus on the operational interaction between the coal producer and coal seam gas producer rather than on provisions dealing with interests in the

⁴⁷ Bathurst, Fox, McDade, Reid, Strati and Huey, above n 35, 327.

⁴⁸ Derman, above n 10.

⁴⁹ This particular component is usually the most problematic in the negotiation of, and operation within, a unitisation agreement.

⁵⁰ Taverne, above n 6, 92.

commodities produced. As such, a coordination arrangement is likely to include provisions dealing with:

- (a) an accurate description of the area of actual and potential overlap between the tenements held by the coal producer and the tenements held by the coal seam gas producer. Such tenements will include both production tenements and exploration tenements over which production tenements might later be granted;
- (b) consent to the granting of tenements to, and the undertaking of exploration activities by, either party within the overlap area, both at the time of signing and in the future;
- (c) the establishment of a development liaison committee to deal with issues that arise between the parties within the overlap area. This committee is different to a management committee under a unitisation agreement because it acts more as a forum for information exchange rather than as a forum for decision making by way of voting;
- (d) a detailed co-development plan setting out the proposed timing, rate, methods and area of production by both parties in the overlap area;
- (e) compensation and indemnity related issues. For example, coal producers will want to be compensated for costs and delays to mining due to hazards caused by coal seam gas extraction. Coal seam gas producers will want to be compensated where the development timetable of the coal producer changes necessitating a relocation of coal seam gas wells or an acceleration of coal seam gas extraction in a particular area;
- (f) rehabilitation obligations, including issues regarding the timing of rehabilitation since there may be a significant time period between the end of extraction of one resource and the extraction of the other resource;
- (g) the sharing of data from exploration and extraction activities;
- (h) the potential to assign the tenement and the coordination arrangement to a third party;
- (i) the coordination of, and process for, review and amendment of co-development plans and safety management plans for both commodities, including provisions dealing with later expansion or contraction of the overlap area;
- (j) termination issues. For example the coordination arrangement needs to deal with what is to occur in the event of insolvency, given that the maintenance of the coordination arrangement will be a condition of both tenements. Termination of the coordination arrangement as a result of insolvency will result in both parties being liable to forfeiture of their respective production tenements;
- (k) non-performance issues. There is a real risk to both parties in the event that one of the parties fails to perform their obligations under the coordination arrangement given that the usual avenue of termination is not available and that there is no intention by the relevant department to enforce obligations under a coordination arrangement;⁵¹ and
- (l) dispute resolution. Although there is a legislative requirement for parties to enter into coordination arrangements, in the event of a dispute, that arrangement will be determined by common law contractual principles or by the dispute resolution mechanisms in the document rather than by government or statutory intervention.

⁵¹ This assertion is based on numerous conversations between the author and Department of Natural Resources and Mines.

There are clearly some obvious differences between unitisation agreements and coordination arrangements. However even where there are common elements to those agreements, such elements tend to differ subtly. Two key examples are with respect to the apportionment of liability and with respect to information sharing.

Within unitisation agreements it is common to see a provision whereby the unit operator is not liable for any damage to the unit area, the property or plant used in the development and operation of the unit area or for the loss of any production arising out of the operation of the area.⁵² Specific provisions will often deal with the fact that even if the unit operator is found to be liable, liability is to be treated effectively as a venture expense for the participants of the unitisation.⁵³ Such provisions are by no means common for coordination arrangements. Instead the terms of a coordination arrangement tend to focus on apportioning liability where there is some disruption to the production of either commodity and addressing insurance requirements and the provision of indemnities, to deal with such disruptions. There is essentially no element of shared risk with respect to a coal producer and a coal seam gas producer under a coordination arrangement.

Provisions dealing with information sharing, like provisions dealing with the sharing of liability, are common to both coordination arrangements and unitisation agreements. The approach adopted is however quite distinct as between those agreements. Both unitisation agreements and coordination arrangements are heavily informed by the amount and accuracy of information available with respect to the relevant area. With respect to the unitisation agreement, the allocation of participating interests will depend on an accurate assessment of each licence holder's contribution to the total production from the unit area. With respect to the coordination arrangement, the level of information will determine the timing for production of both commodities and the likelihood that there will be an irreconcilable overlap of production of both commodities from the same part of the coordination area at the same time.

The provisions dealing with information sharing become essential in a coordination arrangement largely because extraction and further exploration with respect to each of the commodities happens in isolation to extraction and exploration for the other commodity. Unfortunately such provisions are also highly contentious and can cause a number of difficulties in the negotiation process. Those challenges have their basis in the inherent mistrust between producers of coal and coal seam gas. Coal producers often resent the fact that coal seam gas producers have the ability to access coal-drilling results and can use this data without the need for significant additional exploration expenditure. This ability to 'piggy-back' on the efforts of the coal producer is a particularly sensitive issue for coal producers on the basis that coal seam gas producers and coal producers are effectively competitors. Consequently the provisions dealing with information exchange in a coordination arrangement are both contentious and, in many ways, limited. The standard unitisation agreement will also include provisions dealing with the right for each of the parties to have access to information regarding the operation of the unit. By contrast this right is not particularly contentious under a unitisation agreement due to the existence of the common operator and the joint venture relationship between the licence holders.

⁵² Myers, above n 1, 602.

⁵³ *Ibid.* It should be noted that the unit operator will ordinarily remain liable for wilful misconduct and gross negligence.

4. CONCLUSION

Both coordination arrangements and unitisation agreements are directly informed by the inherently different nature of the commodities to which they relate. Unitisation agreements reflect the fact that petroleum is often found in a common pool from which several licence holders can obtain supply. By comparison coordination arrangements focus on a tenement-by-tenement approach dealing with common areas, for supply of different commodities. The legislative background for petroleum and coal tenements also differ markedly and these differences influence the way in which those commodities are dealt with under such agreements.

Coordination arrangements and unitisation agreements also differ in terms of the relationship of the parties post-execution. Unitisation involves a form of joint venture where production is usually undertaken by a single operator appointed by the parties and risks for that production are shared between the parties. By contrast, the entry into a coordination arrangement will not change the fact that each of the parties will continue to extract their relevant commodity separately, with risk continuing to be borne by the individual tenement holder.

Given those differences, it is to be expected that the scope of coordination arrangements and unitisation agreements will be different. Unitisation agreements largely utilise standard joint venture provisions. Coordination arrangements contain provisions more likely to deal with technical operational issues than with the type of issues that arise under a joint venture.

There are some similarities between unitisation agreements and coordination arrangements. Both arrangements seek to maximise the production of valuable and finite resources, to outline the cooperative arrangements that are necessary to achieve that aim and to protect individual property rights with respect to particular commodities. However overall, notwithstanding the contrary belief of the legislature and the relevant department, coordination arrangements and unitisation agreements are separate and distinct types of arrangements between which there are more significant differences than similarities.