

Debt Financing of Oil and Gas Development Projects Offshore Norway

by Lars Olav Askheim

1. Introduction

A characteristic feature of petroleum production offshore Norway is the great size of each project; the investment required for developing a major field might be in the region of 10 billion Canadian dollars. The greatest cost element is the construction and installation of the production platforms – the transportation system (pipelines or tankers) is usually owned by third parties. Although the development plan may be divided into several stages in order to spread the capital requirement over a longer period and to enable the later phases to be partially financed by cash flow from earlier phases, the capital requirements of a participating oil company will still be very large.

In practice, the participants finance their shares of the costs separately, as their financial objectives and capabilities differ. Joint financing only occurs when it is possible to utilize “easy terms” export credit facilities, and even in this instance liability is several. However, this source of capital is usually available only for part of the capital requirements.

For the major oil companies, the funds needed will normally be raised within the framework of their ordinary corporate finance strategy, involving bond issues, equity issues, etc. The smaller oil companies, however, do not generally have the ability to borrow the amount of money required on their corporate credit; more typically, therefore, they will be compelled to resort to project financing. Briefly, *project financing* is employed to describe a loan where the cash flow from project is the credit-generating factor. It might also be used with respect to the term of the loan. In project financing, the terms are tailor-made to fit the project; thus both the amount and use of the money are constrained by the needs of the project, and the payment schedule is geared to project cash flow. Moreover, the creditor is granted a security interest in the project assets; he will also want control over distribution of project income.

The major source of debt finance is the Eurocurrency markets, where it is possible to arrange loan facilities of the size required in a relatively short period of time. But there have also been several instances where the source of capital was another oil company, with excess cash or easier access to the capital markets. In the latter case the lender's borrowing might be arranged on a “back to back” basis (the terms of the two loan agreements are more or less identical), but the lender will probably have to assume some risks *vis-à-vis* the ultimate lender. Regardless of the source of funds, the objective of the lending oil company is to obtain access to oil and gas production. This is achieved by means of a contract for the purchase of the financed production at arm's length prices. The lender might also want a royalty and/or a working interest share.

The documentation required in a major financing is quite extensive. It will typically include:

- the loan agreement;
- a mortgage secured by the debtor's share of the production licence (PL) and Joint Operating Agreement (JOA);
- an assignment of proceeds of the sale of production (or, where the creditor is an oil company, a contract for purchase of the production by the creditor);
- governmental consents;
- consent agreements with the other participants in the JOA and third parties with whom the borrower has contracts for transportation and/or processing of the petroleum; and
- legal opinions.

The rest of this text will concentrate on the loan agreement and the mortgage on the share in the PL and JOA; the other documents will only be touched upon where necessary.

2. Some Aspects of the Loan Agreement

The maximum amount of the loan is usually fixed in the loan agreement itself. If there are cost overruns, the borrower will have to assume the additional financing himself. The lender might, however, be persuaded to assume some of this risk. One way of doing this is through a “pool of funds” concept, whereby the excess (usually

up to a certain limit) will be financed by the lender and the borrower in a pre-determined ratio. There are even examples of lenders willing to fund the borrower's capital requirements for the project without any limits.

Any amount drawn on the loan must be used for the purposes of the project. A possible means of enforcing this provision is to require every drawing to be supported by Authorizations for Expenditures (AFE's); in some cases, however, this may prove impractical. Interest will be charged at the current London Interbank Offered Rate (LIBOR) plus a margin (the "spread"). This margin might vary during the term of the agreement, depending, for example, on which stage the project is at. In addition, there will be various incidental fees.

In "classical banking" the repayment schedule is straightforward, being based on either fixed installments or annuities. Although there are still elements of this approach in project financing, the borrower's obligation to pay is usually linked to a large degree to the performance of the project. In this context one generally distinguishes between "limited recourse" and "non-recourse" financing, denoting the extent to which the borrower's obligations survive a project failure.

The first payment will not have to be made until the project has reached a certain stage, often called "Mechanical Completion" – usually defined as X wells completed with a production of Y barrels for Z months. Interest accrued before this point is added to the principal. If completion is not accomplished within a certain time period, however, the loan becomes repayable by installments over a number of years. The completion risk thus rests with the borrower. After completion there could be a simple repayment plan employing fixed installments, but generally the amount payable depends on the cash flow from the project, as described below. The loan might be "non-recourse", either entirely or in part, but in the latter case the borrower usually will have an option to convert the remaining portion to non-recourse, provided that certain technical and/or financial tests are passed.

For non-recourse financing, the payment obligations are tied to Net Cash Flow from the project. Net Cash Flow (NCF) is defined as sales proceeds less operating costs. The latter will be defined quite strictly; to avoid disputes at a later stage the borrower is allowed a fixed amount for overhead costs, if at all. From the outset the entire NCF will be dedicated to payment of interest and principal. After some time the borrower might have the right, subject to conditions, to get a percentage of the NCF, but these payments may be reclaimed ("claw back") if the lender's share of NCF should become insufficient at a later stage.

Should production cease before the loan is paid back in full, the general rule of law would be that the borrower still has to pay. However, to some extent this is a matter of negotiation. There are instances, for example, where the parties have shared the risk by allocating between them the responsibility for the shortfall according to its particular cause (government action, falling prices, reservoir failure, etc.).

3. The Security Package

The aim of the security rights granted to the lender in project financing is an essentially negative one: to ensure the uninterrupted flow to the lender of funds generated by the project. The lender will want every project asset to be covered by a security interest in one form or another, thus eliminating the possibility of either executions or third party rights interfering with the process of converting the subsurface petroleum to cash. As will have been seen, however, these security rights will not tap any source of funds other than the project itself. Thus, if the project is a commercial failure, the security package will be of small consolation to the lender. The most important element of the security package is the mortgage with respect to the borrower's share in the PL and the JOA; it is also this part of the security package that gives rise to the most interesting legal questions.

3.1 Mortgaging Rights under the Production Licence (PL) and the Joint Operating Agreement (JOA)

The Petroleum Act, 1985, Chapter V enacts an improved regime for mortgaging the borrower's rights to petroleum production. Subject to certain conditions, discussed further on, he is allowed to pledge his combined rights under the PL and the JOA. In order to appreciate the new system, it is necessary to look somewhat more closely into the legal position of the borrower – after all, the lender's security interest is only in those rights possessed by the borrower.

The PL grants an exclusive right to explore for, develop and produce petroleum within the licence area. This right is granted to a group of companies, each of whom will have to sign the government's standard JOA; any amendments to this document require government approval. Under the JOA each participant has, according to the size of his share:

- an undivided interest in all the rights and assets of the joint venture *as a whole*;
- the right to a share of the petroleum produced, as long as he pays his share of the costs; and
- voting rights on the Management Committee.

Because it is only under the terms of the JOA that the borrower is able to participate in the activities in the licence area, it is the *combination* of the PL and the JOA which is the basis for the borrower's rights. Therefore, it seems logical to establish a system in which the subject of the mortgage is the borrower's share in *both* the PL and the JOA.

One important restriction on the borrower's power to mortgage his share is that the loan secured by the mortgage must be used for the purposes of exploration and development in the licence area, though on application it may be possible to grant a mortgage for one PL to finance exploration and development activities under another PL. In both cases the consent of the government is required for the mortgage to be effective. Before making its decision, the government will consider the entire transaction; even if the transaction satisfies the above conditions, approval may be withheld on purely discretionary grounds. While in most respects the mortgagee's interest is subject to the same restrictions and obligations as the borrower's, there is an exception with regard to cancellation of the PL: the mortgagee

must be given notice, and his rights are not affected, provided he demands a public auction of the borrower's share.

is not necessary to secure the approval of the other participants in the PL for the mortgage to be effective, but the lender usually requires some undertakings from them. These are set out in a "Consent Agreement", which typically will include:

- a waiver of the participants' rights of first refusal in the event that the mortgaged share is sold in a default situation; and
- provisions giving the lender both the right to be given notice of any default by the borrower under the JOA, and an opportunity to rectify it before the rather harsh default consequences of the JOA are triggered.

3.2 Registration

The Act establishes a registration system for PLs. To be effective in a bankruptcy proceeding the mortgage must be registered. Priority between conflicting rights granted by the licensee is governed by the provisions of the Registration Act, 1935, which enacted a registration system for real estate similar to the Torrens system. However, it is improbable that these provisions will be very practical, as the number of PLs, dependent rights and mortgages is small, and their existence will be public knowledge within the industry.

3.3 Enforcement

the borrower defaults, the lender may choose between two ways of enforcing his mortgage:

1. He may put the share up for sale at a public auction. A successful bidder for the share will of course be bound by the terms of the PL and the JOA, and the bidder will also have to be approved by the government. As a general rule the government may impose new terms as a condition for approving any transfer of a PL. But with respect to sale at a public auction pursuant to a mortgage, this right may be waived in advance, that is at the time the mortgage is granted. Otherwise few buyers would be interested.
2. The lender may try to recover the debt by relieving the borrower of his rights under the JOA. In this case the government will transfer the control of the share to a third party, usually one of the other participants in the PL, who will act on behalf of the lender. In this fashion the lender will have more direct control of the lifting and marketing process, but his influence in the decisions of the joint venture will not be larger than that of the borrower.

Neither option is probably entirely satisfactory to the lender. Because of the uncertainties about future petroleum prices an auction is not likely to fully realize the present value of the borrower's share, although it will at least reduce the lender's commitment immediately.

Having one of the other participants act in a quasi-receiver role is probably a better way of getting the most out of the borrower's share, but if his payment obligations are limited to NCF it might not produce more cash. The main effect and objective is just to shut out the borrower from the management of the project.

3.4 Assignment of Sales Proceeds

The sales proceeds for the produced petroleum will always have to be pledged to the lender. Usually the funds from the purchaser(s) will go directly into a trust account, from which the borrower will receive disbursements covering his allowable costs under the NCF formula.

The conditions for establishing the security under the Mortgage Act, 1980 will depend on the borrower's marketing approach. Natural gas has until now been sold on long-term contracts; in this instance it is sufficient to give notice to the purchaser of the security interest granted. Payments will then have to be made to the lender. Oil, however, is usually marketed under short-term contracts; at the time the loan agreement is entered into the eventual purchasers are unknown. This fact necessitates the registration of the security in the Company Registry. Further, the individual buyers will have to be notified, either in their contracts or in the invoices; otherwise they will be able to meet their obligations by payments to the borrower.

These problems of perfecting the security are much simpler if the positions of lender and purchaser are combined. In that case sums due to the borrower under the purchase agreement are simply credited to his loan account.

Lars Olav Askheim is a researcher with the Scandinavian Institute of Maritime Law and a graduate student in law at the University of Oslo. He was recently a visiting scholar at the Canadian Institute of Resources Law.

Breach of Confidence and Breach of Fiduciary Duty: *International Corona Resources Ltd. v. Lac Minerals Ltd.*

by Barry Barton

Actions for breach of confidence and breach of fiduciary duty are no strangers to the mineral and oil and gas industries. *International Corona Resources Ltd. v. Lac Minerals Ltd.* (Supreme Court of Ontario, Holland J., March 7, 1986) has brought them into new prominence in a suit that is notable not merely for the large sums of money at stake but also for the thoroughgoing sweep of the relief granted in ordering the defendant to hand over the largest gold mine in the Hemlo region. The legal issues involved are of considerable interest and significance for the resource industries.

Corona owned a group of mining claims in the Hemlo area, and in late 1980 and early 1981 was carrying on an exploration program that included extensive diamond drilling. It published some of its results through the Vancouver Stock Exchange and in news releases. It attracted the attention of Lac Minerals, a major company, and Lac geologists arranged a visit on May 6, 1981 to inspect the site and "to discuss a partnership or whatever". The Lac personnel were shown core, sections and logs with assay results added. They discussed the geology, and Corona's plans for further exploration, with the Corona geologist. They also learned that Corona was

finding that the mineralized zone continued to the west on the adjoining property. (This was the Williams property, which was soon to become the bone of contention.) Two days later the head geologists met again in Toronto to continue their discussions. Although there was conflicting evidence at the trial, Holland J. found as fact that there was no material mention of confidentiality at these two meetings, and that Lac learned that Corona was making efforts to acquire the Williams property. Further discussions between the two companies and an exchange of joint venture ideas followed. Lac invited Corona to make a full presentation to it of its work and results to date, including the geology and the potential of the property. This presentation took place on June 30th, and the Judge found that Corona came to it with the purpose of making a deal, that Lac was to send Corona a proposal, and that Corona again mentioned that it was making efforts to acquire the Williams property.

Since early June, however, Lac had itself been making inquiries about the ownership of the Williams property, and on July 3rd it made its own offer to Mrs. Williams. Mrs. Williams compared Lac's offer with the proposal that Corona had been negotiating, and accepted the Lac offer. Only at this time did Corona discover that it was Lac who had made the competing bid. Corona asked Lac to return the Williams property to it, and in October followed the request with a writ. Lac proceeded nonetheless to develop the property into a mine.

Corona claimed that these events made Lac liable for breach of confidence, breach of a fiduciary obligation and (in a theory that did not get far) breach of contract. As for the claim for breach of confidence, Holland J. set out the three requirements of that cause of action:

- (i) the information obtained must be confidential, that is, it must not be something that is public property and public knowledge;
- (ii) the information must be communicated in circumstances which impose an obligation to respect the confidentiality of the information; and
- (iii) there must be an unauthorized use of the information.

Given the rapid growth of this branch of the law, it may be desirable to point out that there is now firm authority for the equity-based action for breach of confidence: *Saltman Engineering Co. v. Campbell Engineering Co.* (1948), 65 R.P.C. 203 (C.A.), *Slavutych v. Baker*, [1976] 1 S.C.R. 254 at 262. The analysis into three requirements is similarly well-founded: *Coco v. A.N. Clark (Engineers) Ltd.*, [1969] R.P.C. 41, *Ridgewood Resources Ltd. v. Henuset* (1982), 35 A.R. 493 (Alta. C.A.), F. Gurry, *Breach of Confidence* (1984).

With respect to the first requirement, it was found that much of the information received by Lac on May 6th and June 30th was confidential, even though there was a mixture of private and public information. Corona had certainly discussed its results with brokers, investors and others, but it had not made to them the full disclosure of its work that it made to Lac. As to the circumstances, Holland J. found that the information was transmitted to Lac "with the mutual understanding that the parties were working towards a joint venture of some other business arrangement and ... was communicated in

circumstances giving rise to an obligation of confidence." This is undoubtedly the key question in determining liability, and it is a little surprising that it was disposed of in few more words than those quoted. However, the Judge had earlier referred to an observation in the often quoted *Coco* case (*supra*) that where information of commercial value is given on a business-like basis with some avowed common object in mind, such as a joint venture, there would be a strong presumption of an obligation of confidence. The case is a clear example of what Gurry (*supra*, p. 113) puts forward as the general test for establishing the existence of an obligation of confidence – whether the disclosure was made for a limited purpose. As for the third requirement, the Court had no difficulty concluding that without authorization Lac used the information acquired from Corona to assess the merits of the Williams property, and that, but for Lac's actions, Corona would have acquired the property.

Corona also succeeded in its claim that Lac owed it a fiduciary duty to act fairly and not to act to its detriment, and that Lac was in breach of the duty by acquiring the Williams property. The concept of fiduciary obligations defies any summary encapsulation. It embraces a whole series of duties of good faith which equity will require of persons standing in a position of confidence or trust in relation to others in various circumstances. Company directors, trustees and partners, for example, inevitably have fiduciary duties. These obligations, Holland J. pointed out, have been extended to persons negotiating for a partnership or a joint venture arrangement. He quoted *United Dominions Corporation Ltd. v. Brian Pty. Ltd.* (1985), 60 A.L.R. 741 (H.C.A.) at 747: "Indeed, in such circumstances, the mutual confidence and trust which underlie most consensual fiduciary relationships are likely to be more readily apparent than in the case where mutual rights and obligations have been expressly defined in some formal agreement". Holland J. initially takes pains to distinguish confidence and fiduciary obligation but then seems to merge the two doctrines, and in so doing he mirrors the uncertainty in the literature about the relationship between them: Gurry, *supra*, p. 159; P.D. Finn, *Fiduciary Obligations*, 1977, p. 130; J.C. Shepherd, *Law of Fiduciaries*, 1981, p. 330. More disquieting is that the Court apparently assumed that it could determine the existence of a fiduciary obligation from expert evidence of opinion within the industry.

Lac, then, was found to be "in breach of its fiduciary obligation not to use the confidential information it acquired from Corona for its own use while negotiating towards a joint venture." Lac's liability as a defaulting fiduciary was not to be measured merely by any loss incurred by Corona, as if it had been a contract or a tort case. The general rule is that a faithless fiduciary must disgorge its profits; it must answer for its default according to its gain. Lac would therefore be required to restore the Williams property to Corona. This would be a particularly equitable result because of the extreme difficulty of putting a value on a gold property in calculating damages or ordering an account. Lac was nonetheless entitled to be compensated for its costs in developing the mill and mine. Holland J. held that section 37(1) of the *Conveyancing and Law of Property Act*, R.S.O. 1980, c. 90, applied to Lac as a person who "makes lasting improvements on land under the belief that it is

his own". Lac was entitled to \$153,978,000 compensation, together with the sums that it had paid to Mrs. Williams, for the return of the property.

In case his decision should be varied on appeal with respect to remedy, Holland J. also calculated the damages that Lac would then have to pay. The discounted cash flow approach was applied to fix the value of the mine at the date of the judgement. The Judge's misgivings about the extreme difficulty of this sort of exercise were certainly borne out, and his treatment of the effect of corporate income taxes was rather rough and ready, but damages were assessed at \$700,000,000.

The unexpected decision created turmoil on the stock market, where the junior company was not expected to win so overwhelmingly, or at all. An appeal was promptly filed by Lac. Corona also appealed, disputing that Lac reasonably believed that it owned the property. The Court of Appeal has ordered that in the meantime Lac can continue to operate the mine, but subject to the supervision of a committee on which both companies are represented equally.

The significance of the case has certainly not been lost on the mining and oil and gas communities, where the value of exploration information is clearly understood, and where inter-company negotiations for joint developments are commonplace. It has had a cautioning effect by demonstrating the dramatic penalties that can be exacted for any breach of a duty of good faith. Such a situation may arise well before any written agreement is signed, and a constructive trust remedying a breach of good faith can destroy even the most thoroughly searched title. More care can be expected in joint venture discussions to ensure that each other's expectations are clearly understood.

The judgment may be criticized for adding, without any real knowledge of the industry, to the complexities and uncertainties of doing business; but that criticism can be readily contradicted. Companies can take precautions such as the positive earmarking of data or meetings as confidential. (See Finn, "Fiduciary Obligations of Operators and Co-Venturers in Natural Resources Joint Ventures" [1984] A.M.P.L.A. Yearbook 160.) Written acknowledgements can be obtained that information disclosed is to be used only for negotiating and not for acquiring nearby land. Industry associations can refine codes of practice. In any event, nobody can accept that the courts should stand by powerless when one person exercises over another an advantage obtained by reason of a special relationship between them, even in the toughest of competitive environments. Nor do the courts show any inclination to disturb ordinary commercial transactions by the wanton imposition of novel fiduciary duties, and indeed Holland J.'s judgement is noteworthy for the respect it gives to the evidence of experts and the protagonists about proper practices and expectations within the industry.

It is desirable policy to allow information, such as geological or technical data, to flow freely, and arguably a case like this tends to restrict its flow. But there is also a policy benefit in encouraging enterprises to acquire the information in the first place. An enterprise seeks that information in order to gain a competitive advantage;

but the advantage is dissipated unless the information can be kept secret until it is used. The imposition of liability for breach of confidence actually facilitates the release of information for a limited purpose by penalizing the use of it for any other purpose.

It will be interesting to see how the Court of Appeal deals with three points in particular. Lac will argue again that it was not confidential Corona information that directed its attention to the Williams property, so there may be a re-examination of the extent to which public information pointed that way. Secondly, the Court may analyze more exactly the extent to which the circumstances of the case gave rise to an obligation of confidence, if any. Is Gurry's "limited purpose of disclosure" test good law, and is it a subjective or an objective test, i.e., does the obligation of confidence arise whenever the confidant knew, or *ought* to have known, that the information was being disclosed for a limited purpose? (Gurry, *supra*, p. 113). Thirdly, the Court can be expected to clarify the role of expert evidence of practices and expectations within the mining industry with respect to information acquired during negotiations. The proper role may well be in meeting the objective test above – that a reasonable mining man would have realized that in accordance with industry practice he was being given the information in circumstances of confidence. All told, the case requires the courts to draw a difficult line between regular competitive business practice and practices that are sufficiently sharp to amount to actionable breaches of identifiable duties.

Barry Barton is a Research Associate with the Canadian Institute of Resources Law.

Institute Activities

- Institute Executive Director Constance D. Hunt is the Canadian program director for the 32nd annual Rocky Mountain Mineral Law Institute, to be held at the Calgary Convention Centre from July 17 to 19. The program covers practical current legal and land problems associated with oil, gas, and minerals. Related environmental and business topics will also be discussed. The first day's sessions will cover a variety of general topics, with opening speaker Peter Loughheed, former Premier of Alberta, discussing free trade and energy matters. The second day will feature concurrent sessions on mining and oil and gas. The final day will have concurrent landmen's and water sessions. For more information contact: the Rocky Mountain Mineral Law Foundation, Campus Box 405, University of Colorado, Boulder, Colorado, 80309-0405 U.S.A.
- On April 10, the Institute and the Faculty of Law co-sponsored a half-day seminar on "Recent Developments in Norwegian Oil and Gas Law". The seminar, the fourth in an annual series, was presented by Professor Hans Jacob Bull, Assistant Professor of Law at the University of Oslo and Head of the Petroleum Law Department at the Scandinavian Institute of Maritime Law. While in Calgary, Professor Bull also lectured in several Faculty of Law courses, gave a talk to the Canadian Bar Association Natural Resources and Energy Section, participated in a meeting with a committee of the Canadian Association of Petroleum Landmen which is developing

a standard frontier operating agreement, and spoke at a meeting of the Canadian Petroleum Association's Environment Committee which is studying fishermen's compensation programs. In addition, Professor Bull and the Institute's Executive Director Constance D. Hunt made a presentation to the Risk and Insurance Management Society in Toronto.

- The Institute has recently hosted several other international visitors. In late January, Senator The Hon. Gareth Evans, Q.C., Australian Minister for Resources and Energy, visited the Institute and the Faculty of Law to exchange views on aboriginal land rights issues. In March the Institute hosted a visit by Peter Berry, Divisional Solicitor of the Mines Division, Ministry of Energy, Government of New Zealand. Mr. Berry participated in a small Institute workshop on the regulation of mining. And in May the Institute presented a seminar on "Offshore Petroleum Jurisdiction and Management: The Canadian and Australian Experiences," led by Richard Cullen, a University of Melbourne law graduate who is now a doctoral candidate at Osgoode Hall Law School.

- Constance D. Hunt, Executive Director of the Institute, presented a paper on the topic *New Issues in Offshore Liability, Indemnity and Insurance* at the annual meeting of the International Bar Association's Section on Energy & Natural Resources Law, held in Munich, West Germany in late February. More than 300 participants from 33 countries were in attendance at the meeting.

- On August 21, the Institute and the Canadian Bar Association (CBA) Natural Resources and Energy Section will be convening a symposium on the topic "Energy and Resources: Values of Science, Law and the Community in Conflict." The symposium will take place as part of the CBA's 1986 Annual Meeting which is being held in Edmonton from August 17 to 21. The goal of the symposium is to examine how lawyers and legal structures take account of other, "non-legal", values and perspectives in resolving conflicts. In particular, this symposium will focus on the problems of accommodating scientific voices and community values in those legal fora that deal with the management of energy and natural resources. Because these issues extend in interest far beyond the legal community, speakers at the symposium will comprise a cross-section of prominent figures from a range of disciplines and interest groups in Canada. In a departure from the traditional CBA annual meetings, which limit attendance strictly to members, the symposium will be opened to non-lawyers. The registration fee for non-lawyers, and lawyers who will not also be registering for the CBA Annual Meeting, is \$75. For more information write to CIRL at The University of Calgary, Calgary, Alberta T2N 1N4 or phone (403) 220-3200.

Publications

Crown Timber Rights in Alberta, N.D. Bankes. Working Paper 10. 1986. ISBN 0-919269-17-6. 128 p. \$15.00.

This book provides a descriptive account of the historical evolution of the Alberta forest tenure system and of the present tenure system. It begins with a review of the constitutional position of the forest industry and continues with an analysis of the common law background and the different legal techniques available for disposing of rights to cut timber.

An historical outline of the disposition follows, indicating that, until the 1960s, the primary forms of tenure available in Alberta were licences or berths, and permits for smaller volumes. These rights tended to be short term but, in the case of licences, were renewable for so long as there was merchantable timber on the lands. Obligations to reforest were unknown and indeed were inconsistent with the short duration of the tenures.

During the 1950s large volume timber rights were granted in the form of pulpwood agreements and these negotiated agreements can be seen as the direct precursors of the modern forest management agreement. The major change in the Alberta tenure system came in the mid-1960s with the introduction of both the forest management agreement and the quota and licence. The latter granted the quota holder with a licence the right to cut a proportion of the allowable cut within a forest management unit. Both the quota and the forest management agreement are predicated upon renewable rights to harvest a perpetual resource.

The discussion analyses the two systems and the obligations and rights of the quota holders. The book concludes with an extensive review of the two major tenure forms which have been made available in Alberta: pulpwood agreements and forest management agreements. The emphasis is on the latter, with an attempt to discern trends and an evolution in the nature and content of these agreements.

For a list of other publications write to the Canadian Institute of Resources Law, 430 Bio Sciences Building, The University of Calgary, Calgary, Alberta T2N 1N4 or telephone (403) 220-3200.