IN THE MATTER OF THE *FOREST ACT*, R.S.B.C. 1996, c. 157
TIMBER HARVESTING CONTRACT AND SUB-CONTRACT
REGULATION, B.C. REGULATION 22/96 AND
THE *COMMERCIAL ARBITRATION ACT*, R.S.B.C. 1996, c. 55

BETWEEN:

HAYES FOREST SERVICES LIMITED

AND:

INTERNATIONAL FOREST PRODUCTS LIMITED

AWARD

COUNSEL FOR THE CLAIMANT	CHARLES F. WILLMS and BROOK GREENBERG
COUNSEL FOR THE RESPONDENT	ERIC J. HARRIS, Q.C. AND JENNIFER LAMONT
ARBITRATOR	MURRAY A. CLEMENS, Q.C.
PLACE OF ARBITRATION	VANCOUVER, B.C.

BACKGROUND

1. Hayes Forest Services Limited ("Hayes") is a logging contractor which has been engaged in the logging business in British Columbia since 1957. Hayes has logged on tree farm License 10 (TFL 10), located on the mainland coast across from Campbell River, since 1982.

2. International Forest Products Limited ("Interfor") holds the exclusive right to harvest logs on TFL 10 pursuant to a license granted to it by the Province of British Columbia.

3. Hayes and Interfor are successor parties to a logging contract, dated January 1, 1990, for the provision of logging and road building services in relation to TFL 10. The January 1990 contract was for a term of five years and was to expire on December 31, 1994. By letter dated October 26, 1993, Interfor or its predecessor wrote to Hayes or its predecessor "moving the expiry date from December 1994 to December 1998." In a previous arbitration between these parties, Arbitrator Josiah Wood, Q.C. held that the conduct of the parties evidenced "a contractual relationship based upon a replacement contract"; in other words the parties entered into a replacement contract with an expiry date of December 31, 1998 in terms identical to those contained in the contract dated January 1, 1990. Throughout these reasons, I shall refer to this as the "Contract".

4. The Contract is a replaceable contract as that term is defined in the Timber Harvesting Contract and Sub-Contract Regulation, B.C. Reg. 22/96 (the "Regulation"). Section 13(1) of the Regulation provides as follows:

> **Term and commencement**
>
> 13 (1) A replaceable contract must provide that
>
> (a) if the contractor has satisfactorily performed its obligations under the contract, and conditional on the contractor continuing to satisfactorily perform the existing contract, the licence holder must offer a replacement contract to the contractor, and
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> (b) the replacement contract must

(i) be offered 3 months or more before the expiry of the contract being replaced,

(ii) provide that it commences on or before the expiry of the contract being replaced,

(iii) provide for payment to the contractor of amounts in respect of timber harvesting services as agreed to by the parties or, failing agreement, as determined under section 25, and

(iv) otherwise be on substantially the same terms and conditions as the contract it replaces.

5. It was not suggested in this arbitration that Hayes had not satisfactorily performed, or was not continuing to perform its obligations under the Contract. Hayes and Interfor have not entered into a written contract to replace the expired Contract but have been negotiating to that end. The matters in question in this arbitration relate to events after December 31, 1998, i.e. the date upon which the Contract was said to expire. It is clear that the parties have proceeded on the basis that their relationship is governed by a replaceable contract mandated by the Regulation notwithstanding that all of the terms have not yet been settled. I have proceeded with my deliberations on the basis that the contract governing the relationship in 2001 is a replacement contract to the Contract as required by the Regulation.

6. At the outset of this arbitration, Hayes submitted a number of issues for resolution pursuant to the dispute resolution provisions of the Regulation:

(a) The appropriate rates to be paid to Hayes for logging services provided in 2000, namely:

(i) 42,145.93 m^3 of conventional logging; and

(ii) 970.38 m^3 of stumpage set logging.

(b) The appropriate rates to be paid to Hayes for logging services provided in 2001, namely:

(i) 13,411.76 m^3 of helicopter logging.[1]

(c) The appropriate rates to be paid to Hayes for road building services and hourly equipment rates for 2000 and 2001.

(d) The actual volumes of logging work performed by Hayes in 2000 and 2001 for which Hayes is entitled to payment, including the proper treatment and accounting of volumes of "waste" and "residue" wood.

(e) Compensation for the volume shortfall from Hayes' annual entitlement to a minimum of 24,452 m^3 of work in 2001.

(f) Appropriate interim rates to be paid for logging conducted in 2000 and 2001.

7. At the commencement of the hearing of this arbitration, Counsel advised that the parties had settled the disputes identified at sub-paragraphs (a), (c) and (d) and that the claim described at sub-paragraph (f) was not being pursued. What was left to be decided was the appropriate rate to be paid to Hayes for helicopter logging services provided in 2001 for an agreed volume logged of 14,859 m^3 (the 2001 Helicopter Logging Rate Claim) and a claim by Hayes for an alleged volume shortfall of 9,593 m^3, in 2001, representing the difference between the agreed volume logged of 14,859 m^3 and what Hayes argued was its entitlement to a minimum annual volume of 24,452 m^3 (the 2001 Shortfall Claim).

8. The parties have joined issue concerning the 2001 Helicopter Logging Rate Claim which involves the determination of a logging rate pursuant to s. 25 of the Regulation.

9. Interfor responded to the 2001 Shortfall Claim by a number of alternative positions. Interfor takes the position that it is not contractually obliged to provide Hayes with a minimum annual volume. As it allocated 100% of the logging on TFL 10 in 2001 to Hayes, there can be no shortfall claim. In the alternative, Interfor argues that the shortfall was attributable to *bona fide* business and operational reasons on the part of Interfor and that Interfor is entitled to allocate the work over a five-year control period (2000 – 2004) provided that at the end of that period, Hayes will have received at least 95% of a specified amount of work. As a result, says Interfor, the claim is premature and cannot

[1] At the commencement of the arbitration, the parties agreed that the actual measure of the volume logged on TFL 10 in 2001 was 14,859m^3

be determined until the end of the control period. Finally, Interfor argues that, if there was a shortfall, it was caused by events beyond the control of Interfor.

10. Sections 21 and 22 of the Regulation are the basis for the last two mentioned defences:

> **Compliance over time**
>
> **21** A replaceable contract must provide that the amount of work that the licence holder allocates to the contractor and that the contractor is required to perform in any year during the term of the contract may differ from the amount of work specified in the contract, provided that
>
> (a) the difference is attributable to bona fide business and operational reasons on the part of the licence holder, and
>
> (b) the amount of work that the licence holder allocates to the contractor under each replaceable contract over each 5 year cut control period of the licence to which the contract relates is equal to or greater than 95% of the aggregate of the specific amount of work provided for under that contract during that 5 year cut control period, or such other cut control period as may be substituted for the licence by the regional manager, less the aggregate of any reductions in the amount of work imposed during that cut control period as permitted by sections 20 and 22.
>
> **Events beyond control**
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> **22** (1) A replaceable contract must provide that the licence holder is not liable to the contractor for any failure to allocate to the contractor in any year the amount of work specified in the contract, as adjusted under section 20 or 21, if the failure results from changes in law, natural disasters, interference by a person who is not a party to the contract or any other event beyond the reasonable control for the licence holder other than a change in the market price of logs.
>
> (2) A replaceable contract must provide that the contractor is not liable to the licence holder for any

> failure to perform the amount of work allocated by the licence holder in any year if the failure results from changes in law, natural disasters, interference by a person who is not a party to the contract or any other event beyond the reasonable control of the contractor other than a change in the market price of logs.

11. In the final alternative, Interfor joins issue with Hayes with respect to the assessment of damages concerning the shortfall claim.

12. As noted Hayes and its predecessor and Interfor and its predecessor have been involved in logging on TFL 10 since 1982. Different methods of logging are employed to suit the particular environmental circumstances. This arbitration involves helicopter logging on TFL 10 in 2001.

2001 HELICOPTER LOGGING RATES

13. The dispute resolution provisions concerning logging rates in the Regulation come into play where the parties are unable to agree on a rate for logging to be done in a particular year on a particular tree farm licence, concerning which the parties have entered into a replaceable contract. Section 25(1) of the Regulation sets out the principles by which a rate is to be determined in arbitration.

> **Rate disputes**
>
> **25** (1) A replaceable contract must provide that if a rate dispute is referred to arbitration, the arbitrator must determine the rate according to what a licence holder and a contractor acting reasonably in similar circumstances would agree is a rate that
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> (a) is competitive by industry standards, and
>
> (b) would permit a contractor operating in a manner that is reasonably efficient in the circumstances in terms of costs and productivity to earn a reasonable profit.

14. Section 25(2) lists a number of factors which may be considered in setting an arbitrated rate:

(2) In determining a rate under subsection (1), an arbitrator may take into consideration the following:

(a) rates agreed to by the licence holder and contractor for prior timber harvesting services;

(b) the costs and productivity of the contractor for prior timber harvesting services carried out by the contractor;

(c) relative to prior timber harvesting services, the impact on costs and productivity likely to arise from:

(i) changes in operating conditions including, without limitation, changes to terrain, yarding distances, hauling distances, volume of timber per hectare;

(ii) changes in the total amount of timber processed;

(iii) changes in the required equipment configuration;

(iv) changes in the law if the changes affect costs or productivity of the timber harvesting operation;

(v) changes in the underlying costs of timber harvesting operation including, without limitation, the cost of labour and the impact of inflation on wages, fuel, parts and supplies;

(d) the costs in the logging industry for each phase or component of a similar timber harvesting operation;

(e) the rates in the logging industry for similar timber harvesting operations;

(f) any other data or criteria that the arbitrator considers relevant in ascertaining the rate that a licence holder and a contractor acting

> reasonably in similar circumstances would agree to.

15. Pursuant to s. 11 of the Regulation, a copy of each arbitration award or reasons for the award must be delivered to the Deputy Minister of Forests and kept in a register called the "Register of Timber Harvesting Contract and Sub-Contract Arbitration Awards", and must be available at each regional office of the Ministry for public review. Given that contractors and licence-holders are operating under a legislatively regulated regime, under which all replaceable contracts have similar or common elements, much assistance can be obtained from the developing and evolving body of arbitration awards. As the Regulation requires that replacement contracts have a common structure and general content, I take the requirement of s. 11 of the Regulation as an indication that the Legislature has intended that arbitrators be cognisant of and issue awards consistent with prior awards not only involving the parties to the arbitration, but involving other licence-holders and contractors. With knowledge and consideration of preceding awards and as guiding principles evolve in the body of arbitral decisions, the participants in this industry will hopefully be in a better position to resolve their disputes by negotiation.

16. Section 25 requires that an arbitrator take an objective and prospective approach. In *Hayes Forest Services Ltd. v. Pacific Forest Products Ltd.*, 2000 BCCA 66, Finch J.A. (as he then was) spoke for a unanimous court as follows:

> [43] The language of s.25(1) indicates clearly that an arbitrator is required to take an objective approach in determining a rate. Section 25(1) refers to what a "a licencee" and a contractor" would agree to. It does not refer to the actual parties to the dispute. The section also refers to what a licencee and a contractor "acting reasonably ... would agree". The conduct of reasonable persons is an objective test. The words "would agree" also suggest a prospective, and therefore objective approach. Section 25(1) postulates a hypothetical scenario for the arbitrator, one in which the arbitrator places himself or herself in the position of the parties, acting reasonably, at the commencement of the contract year in the circumstances then known to both of them. Then, the task is to determine what such parties at that time and in those circumstances would have agreed to, bearing in mind the two criteria for such an agreement mandated by s. 25(1). Those criteria are (a) a rate that

> is "competitive by industry standards", and (b) a rate which will permit the contractor to earn "a reasonable profit".
>
> [44] However, the statutory scheme also clearly contemplates that the arbitration process will commence after logging operations for the contract year have begun, and quite possibly, as in this case, after the year's logging operation has concluded. After the fact arbitration must have been in the contemplation of the Regulation drafters given: the history of contract negotiations in the industry; the length and complexity of, and the preparation required for, such arbitration proceedings, including the practice of adducing expert evidence; and most importantly, the regulatory provision for payment of a provisional rate pending resolution of a rate dispute. The requirement for a provisional rate clearly contemplates commencement of logging for the contract year in dispute, before the rate for that year is set.
>
> [45] The result is that the arbitrator is required to take an objective-prospective approach in setting the year's rate, but he or she will be doing so either during the contract year or after the logging operations for that year have concluded, and when actual volumes logged, and hence unit costs, will be known either in whole or in part. The question is whether the arbitrator is required by the language of the Regulation to ignore, or permitted by its language to consider, evidence of how much timber has in fact been harvested and how much it cost per unit to do so.

17. The Court went on to consider the admissibility and relevance of the actual volumes and costs and commented as follows:

> [50] But evidence of actual volumes and rates may be relevant and admissible without treating that evidence as determinative of the rate. Actual logging harvest volumes are some indicia of whether the licencee's volume expectations, as expressed in the contract, will be realised. Actual volumes are after the fact evidence of a previous risk or chance. They show what is within the range of the possible. There is no "one-to-one" relationship between the actual and the previous contingency. The latter is a matter of prior judgment, which if exercised reasonably, takes into account those matters falling within the range of that which is possible in practice.
>
> [51] I am therefore of the view, taking all of these considerations into account, the evidence of actual volume harvested may be admissible as relevant to the contingency of the contract volume not being achieved. That contingency is a factor

> which reasonable parties would take into account in setting a rate in advance of the logging taking place.
>
> ...
>
> [56] I would conclude that evidence of actual volume of timber harvested in the contract year in question is not generally relevant to the arbitrator's task of fixing a rate for that year, nor is evidence as to the cause of volume shortfalls generally admissible. However, evidence of actual volumes harvested may be relevant to the issue of contingencies reasonably within the contemplation of the contracting parties prior to commencement of logging operations, and a consideration to be factored into the rate to the extent that reasonably contracting parties would consider it realistic to do so.

18. As will be developed in greater detail later in these reasons, the statutorily mandated terms of a replaceable contract that pertains to a licence for the coastal area for the 2001 logging year, include a provision that the amount of work specified must be expressed as a percentage of the total amount of the timber processed by the licenceholder in that year. (Regulation s.18(1)). This requirement is subject to the parties reaching an agreement to express the amount of work in a different manner (such as a specific volume) pursuant to s.18(8) of the Regulation.

19. The most recent heli-logging on TFL 10 involved approximately 29,000 m^3 harvested in 1999.

20. The evidence before me was that Hayes was assigned and performed all of the work on TFL 10 in 2001. The amount of work which was proposed and performed throughout the year was, however, not static.

21. Interfor initially advised Hayes by letter dated March 23, 2001 of a proposed logging plan for TFL 10 for 2001 by which it would harvest cut blocks B-3, B-4 and C-1. It was proposed that all of the wood would be helicopter removed and water dropped with falling taking place in cut blocks B-3 and B-4 in late May, with the wood being flown from those two blocks in mid-June and early July. Falling on cut block C1 was to commence in October with the wood being flown in mid-October through early

November. The total volume proposed was 26,000 m^3. The total volume was adjusted to 27,000 m^3 by letter from Interfor to Hayes dated May 25, 2001.

22. By letter dated September 24, 2001 Interfor advised Hayes that the 2001 logging plans had been amended. By this time Hayes had logged 14,595 m^3 on cut blocks B-3 and B-4. The logging plan was amended to abandon the logging of approximately 13,000 m^3 on cut block C-1. It is the cancellation of this work, with the result that Hayes was allocated less than 24,452 m^3 of logging in 2001, which forms the basis of the shortfall claim.

23. In previous arbitrations, arbitrators have taken different approaches to setting rates pursuant to s. 25 of the Regulation. They include:

(a) adjusting rates previously agreed to between the parties for the operation in questions (the previous rate approach) favoured by Arbitrator Taylor in *Lineham Logging Ltd. v. International Forest Products Ltd.* , December 3, 1999;

(b) deriving a rate based on the assessment of a properly qualified expert (the expert evidence approach) used by Arbitrator Pearlman in *Western Forest Products Limited v. Hayes Forest Services Limited.*, May 6, 1999; and

(c) deriving a rate from the reasonable costs actually incurred with a reasonable profit margin (the reasonable cost/profit approach) used by Arbitrator Wallace in *Pacific Forest Products Limited v. Hayes Forest Services Limited*, August 15, 1997 and Arbitrator MacIntosh in *Hayes Forest Services Limited*, August 25, 2000.

24. In this arbitration Hayes has urged that the rate for the 2001 helicopter logging be set as follows:

(a) a rate should be based on the previous rate agreed between the parties for similar harvesting operations on the same licence, with adjustments for changes in volume, costs and operating conditions;

(b) the best evidence of costs of logging and the adjustments to be made to the previous rates are found in Hayes' actual costs of performing the logging and other admitted cost increases such as labour, fuel and inflation; and

(c) to ensure the adjusted rates are reasonably competitive, they should be tested against the range of costs estimated by the experts, as adjusted to correct mistaken or unsubstantiated assumptions.

25. The previous rate for helicopter logging on TFL 10 in 1999 was $90 per cubic metre. It is to be noted that the 1999 rate was for a land drop as opposed to a water drop operation and was not directly agreed to but was set by an arbitrator. More will be said of this later.

26. On the evidence, Hayes argued that the previous rate approach produces a rate of $89.19 per cubic metre for the 2001 helicopter logging. By way of check, Hayes produced the expert evidence of Kevin W. Davie of Anik Consulting Ltd. to the effect that an appropriate rate for the 2001 helicopter logging work on B-3 and B-4 was $92.02 per cubic metre. In addition to this rate, Hayes claimed $35,598.73 for booming ground installation costs which it says Interfor is contractually obliged to pay.

27. Interfor urged the expert evidence approach and called in aid the evidence of James Mitchell of Strathinnes Forestry Consulting Ltd. He opined that a reasonable logging rate for the logging of B-3 and B-4 in 2001 was in the range of $70.59 to $71.01 per m^3. Interfor also tendered the evidence of Siggi Kemmler of Timbercraft Contracting Ltd., of a reasonable logging rate for 2001 for blocks B-2 and B-4 of $68.88 per cubic metre and $72.42 per cubic metre for cut block C1.

28. As is commonplace, the experts founded their opinions, in part, on assumed facts. When those assumptions were adjusted or errors corrected, counsel were able to demonstrate an apparent arithmetic adjustment to each opinion on rates.

29. In the end Interfor sought a rate of $74.01 per cubic metre as the appropriate rate for the 2001 helicopter logging on TFL 10 and acknowledged liability for $16,000 for the costs of the extraordinary mobilization required of Hayes by Interfor.

30. Interfor took the position that the previous rate approach is inappropriate. Interfor says there is no recent rate history for sufficiently comparable work to serve as a reference from which a current rate can be determined. Interfor noted that the only prior heli-water drop rate on TFL 10 was $49.60 per cubic metre, applied to logging in 1990. Neither party attempted to extrapolate from that rate to the work done in 2001.

31. Interfor argued that the logging operation in 1999 (heli-land drop) was significantly different than the logging operation in 2001 (heli-water drop). Further, Interfor took the

position that the 1999 rate was an arbitrated rate without an express finding by the arbitrator accepting Hayes' evidence on costs in that arbitration. In his award, Arbitrator George Macintosh, Q.C., stated as follows (at p. 5):

> I will be looking closely at actual costs in 1999 because I believe they provide very helpful evidence of what costs another contractor would have incurred in the same circumstances in 1999, and helpful evidence, even though after the fact, of what rates would have been agreed to at the start of 1999, having in mind the requirement of subsection 21(1)(b).

32. In dealing with his specific consideration of the 1999 helicopter logging rate, Arbitrator Macintosh noted that Hayes expert's opinion (Mr. Davie) supported a rate of $94.70 while Hayes' actual costs plus profit of 15% led to a rate of $90 (at p. 14):

> As with its other costs evidence from 1999 I concluded from the testimony that Hayes' heli-logging costs were reasonably incurred. The reasonableness of these costs as the basis for the rate to be awarded is successfully tested by the similar but somewhat higher rate presented in the expert testimony.

33. The rate determined by Arbitrator Macintosh for the 1999 operation was pursuant to a statutorily imposed process by which a contractual term was imposed upon parties who were unable to agree. The arbitrated rate set pursuant to the Regulation is clearly a proxy for the parties' agreement. As a result, the particular basis upon which the arbitrator makes the determination and the reasons given do not form a basis upon which it can be said that the rate cannot be used for the purposes of s. 25(2)(a). Indeed, Interfor did not take the position that because the 1999 helicopter logging rate was established in arbitration it could not be regarded as an agreed rate.

34. It is the coercive influence of the dispute resolution process in the Regulation which inspires parties to reach agreements, as was apparent from the disputes removed from arbitration at the commencement of this hearing.

35. I must determine whether the helicopter logging activities on TFL 10 in 1999 were sufficiently comparable to the logging activities in 2001 to enable me to make adjustments to them to arrive at an appropriate rate.

36. It appears that many arbitrators have expressed doubt as to the efficacy of comparing similar harvesting operations, in applying s. 25(2)(e) of the Regulation. I respectfully agree with the following observation of Arbitrator Martin Taylor, Q.C., at pages 10-11 of *Lineham v. Interfor*:

> The unique nature of each operation makes comparison with those elsewhere possible only to persons with extensive expertise and full knowledge of all the relevant factors. The evidence shows that such judgment differs widely as between one expert and another, creating large difficulties, no doubt, even for arbitrators with expertise in the industry who have not themselves examined and compared the operations "on the ground". Making such comparisons has been described by other arbitrators as a "nebulous exercise", and this is certainly so in the present case.

37. Here the logging operation was conducted by the same contractor on the same tree farm licence two years after the "reference" logging operation. Both operations involved helicopter logging. The difference is that the 1999 operation was a land drop while the 2001 operation was a water drop. This difference was described in evidence by Harold Hayes as follows:

> Q. Now how did the phases of a water drop helicopter logging operation compare to the phases of a helicopter land drop operation.
>
> A. Well, the phases are essentially the same up to the point that you drop the wood in the landing, either on the land or in the water. It is at that point once the wood is landed that the phases start to change.
>
> With land drop operations you would have a front end loader or hydraulic loader to receive the wood and to recover the chokers along with two or three ground group called chasers.
>
> On a water drop operation you would have boom boats in the water, you would have two to three chasers or more, you would have a choker float and in addition rather than having conventional steel chokers you would have steel chokers with bobbers or flotation devices on them.
>
> At that point the major differences occur. In conventional land drop you would have the loading, hauling dumping

> phases while with the water drop you would have the clearing of the bullpens, towing, assisting log barges, the booming, the possible water bundling, essentially the handling on the water.
>
> Q. Okay. And you said that the phases up to the landing of the wood are essentially the same. What are those phases?
>
> A. Those are falling, including the helicopter falling support for 206. It would be the ground crews or rigging crews to attach the chokers. It would obviously be the helicopter itself. It would be obviously the pilots, the engineers supporting that. It would be — it would be — up to that point it would be all the same.
>
> (Transcript June 21, 2002, pp. 214-215)

38. The major difference between the land drop operation in 1999 and the water drop operation in 2001 was the handling of the logs after they were dropped. With land drop, logs are removed from the drop zone by use of a log loader. A second loader is then used to process and load the logs on logging trucks by which they are hauled to a water dump where the bundles of logs are parbuckled into the water. A boom boat operator then assembles the bundles into log booms for towing. After the operation, the contractor piles the remaining debris and deactivates the roads.

39. With a water drop operation, the logs are dropped in a designated drop area, the chokers are retrieved and loose logs are bundled in a bag boom and towed from the drop zone to a barge loading zone. Further, according to the evidence of Mr. Davie and Mr. Mackay, Interfor's area engineer responsible for TFL 10 in 2001, a water drop operation is more efficient than a land drop in that the cycle time is shorter.

40. Interfor also noted that the 1999 operation involved specialized logging with extra handling resulting in higher rates. Hayes disputed the significance of this distinction and argued that the 2001 logging was, for all practical purposes, stumpage set logging in light of the timing of the cut, the type of wood harvested and the bucking specifications. In cross-examination, Harry Barrett, a registered professional forester and Interfor's area manager responsible for TFL 10, testified that the cut off date of August 15 for blocks B-3 and B-4 was chosen in order to set stumpage. It is also apparent from the bucking

specifications provided for the 2001 logging that they required more cuts and handling than would otherwise be required by standard bucking specifications. I do not consider the difference in logging specifications between 1999 and 2001 to constitute a sufficient difference to materially influence the comparability of those logging shows.

41. Another issue relating to the comparability of the 1999 cut to the 2001 cut is logging chance. Logging chance refers to the mix of physical and operational characteristics experienced in a particular logging operation which influence the relative difficulty in harvesting the logs. These characteristics can include the volume harvested, density, piece size, composition of species, slope characteristics, layout of the cut block including retention areas, fly distance between hook-up of logs and the drop site, elevation difference between the hook-up location and the drop site, flight path, terrain conditions and drop site conditions.

42. The only direct evidence comparing the logging chance in 2001 to the logging chance in 1999 was that of Harold Hayes, to the effect that the logging chance in 2001 was poorer than the logging chance in 1999 based on the following factors:

(a) a lower volume was logged in 2001 (14,859 m^3) compared to 1999 (29,000 m^3);

(b) the average piece size of .41 m^3 was smaller than the average piece size of 1.51 m^3 in 1999 due to the fact that the 1999 logging involved an older stand of timber; and

(c) there was a longer fly distance of 7 km in 2001 compared to 1 km in 1999.

43. James Mitchell, the expert witnesses called by Interfor, considered the 2001 logging chance on TFL 10 but did not compare it to the logging chance in 1999. He specifically evaluated the individual conditions or criteria comprising the logging chance and described it as "slightly above average" compared to the industry norm. With respect to the specific negative factors identified by Mr. Hayes, Mr. Mitchell described the size of the cut as "very poor", the piece size of .88 m^3 as "close to average" and a yarding distance of 1.5 km as slightly longer than optimal. He did not deal with the flying distance to service the helicopter.

44. The major conflict between the evidence of Mr. Mitchell and that of Mr. Hayes was the piece size. Piece size is the average size of the logs harvested, expressed in cubic metres. The larger the piece size, the less handling is required with consequent cost savings. Mr. Hayes took the piece size from the dry land sort measure at Avalon of .41 m^3 while Mr. Mitchell relied on the water scale measure conducted at the booms at the drop site. On the evidence, it appears that the dry land scale is easier to conduct and is generally more reliable than a water scale. Interfor called Dave Skipsy, the licensed coastal scaler who conducted the water scale in Toba Inlet. From his field diary, Mr. Skipsy calculated the piece size of the logs flow and scaled at .885 m^3. Neither party questioned the methodology or performance of the log scale at Avalon in 2001 and given that I am being asked to compare the 1999 work to the 2001 work, I find the piece size, as determined at Avalon, as the appropriate one for the purposes of comparison of logging chance.

45. On the whole of the evidence, I consider that the logging chance in 2001 was slightly inferior to the logging chance in 1999. I have not included, in the consideration of the difference, the lower volume logged as that was not known until well into the operation. The governing factors include the smaller piece size and the fly distance to service the helicopters. As a result, extrapolating the 1999 rate to arrive at a rate for 2001 without making an adjustment for logging chance, as Hayes has done in its submissions, in fact favours Interfor.

46. As noted above, Interfor urged me to reject the application of this approach on the basis that the land drop operation of 1999 was so different from the water drop operation in 2001 that the rates could not be compared or extended. I find this position to be inconsistent with the evidence of Harry Barrett given in the arbitration before Arbitrator Macintosh (and put to Mr. Barrett in his cross-examination before me) where he testified as follows:

> Q And what typically is the pattern of those negotiations in your experience in terms of the exchange of positions and information?
>
> A Generally we have a rate that's been established for an area and it's discussion on if there's any increment or not

> to that rate based on cost of living. We look at the IPPI index from Stats Can and the IWA labour increment from a logging portion. We have an approximate 50/50 split. 50 percent of the logging component has calculated approximately as a labour component, yet 50 percent is other cost. We also look at any other extraordinary changes to the logging. If there's something substantial, then we will look at increases or decreases based on the changes. If not, it's the previous year's rate. [emphasis added]

47. While I would not describe the difference between a land drop and a water drop operation as an extraordinary one, it is clear that the parties are familiar enough with the logistics for such operations and the methods of tracking costs, to enable them to make the appropriate changes and extensions to arrive at a rate.

48. The difference between the 1999 land drop and the 2001 water drop helicopter logging costs can be broken down into discreet elements. The costs incurred for the different phases can and have been segregated in Hayes' records so as to enable Hayes to demonstrate the difference in costs between the two methods. On the whole of this evidence, I am satisfied that a fair adjustment can be made to 1999 logging rates to arrive at the 2001 rate.

49. My review of the detailed costs records produced with respect to the 2001 heli-logging indicates that the bulk of the costs are incurred in elements which are common to land and water drop operations. Those include falling, yarding, and helicopter support.

50. I accept the evidence of Hayes that the appropriate rate for 2001 heli-logging may be determined after the 1999 rate of $90 per m^3 is adjusted for the differences in the 1999 land-drop and the 2001 water drop operations as related to flight characteristics (load-haul), booming and towing, mobilization and helicopter productivity as well as differences in the cost of fuel between 1999 and 2001. The only change I have made to the Hayes' adjustment is that I have only adjusted for the difference between one-half of the mobilization costs in 2001 to ensure fair comparability with the 1999 rate. The double mobilizatin issue will be discussed further, below.

51. These adjustments, based on an agreed volume of 14,859 m^3 are as follows:

Load Haul	(5.82)
Fuel Adjustment	1.22
Booming & Towing	2.32
Mobilization	.76
Heli-Productivity	(.62)
Total Costs Changes	(1.94)
Profit @ 15%	(.29)
Total Adjustment	(2.23)
Rate per 1999 Award	$90.00
Less Total Adjustment	(2.23)
Indicated Rate	$87.77 per m^3

52. The double mobilization issue arises in this way. In order to meet the timing requirements of Interfor, Hayes interrupted another logging show and mobilized its equipment and work force to log TFL 10. After the logging was completed on B-3 and B-4, Hayes returned to the job it had interrupted. In the result, Hayes incurred the costs of an additional mobilization. These costs would not have been incurred had it proceeded with Interfor's work at the conclusion of the then ongoing operation. As noted above, Interfor acknowledged its liability for these additional mobilization costs but argued that they should be limited to the sum of $16,200.00 based on a suggested extraordinary mobilization expense of $0.60 multiplied by the planned volume of 27,000 m^3. The $0.60 figure for extraordinary mobilization comes from an invoice dated August 31, 2001 issued by Hayes to Interfor "RE: Heli Advance – Toba" which requested payment for the logging at a rate of $76.24 compared to a previous bill issued when approximately 70% of the logging was complete at $76.84 m^3. Interfor inferred the difference of $.60 m^3 on the two heli advance invoices as reflective of the claim for the extraordinary mobilization.

53. In addition, Interfor argued that issuing this invoice at the rate of $76.24 m^3 constituted "a clear indication of the rate acceptable to Hayes based on the logging plan as is contemplated by the Regulation". I do not accept this submission. Without more, it is a tenuous inference to be drawn from an invoice titled "Heli Advance". I note that the proposition was never put to any Hayes witnesses, nor did any Interfor witnesses testify that they understood this to represent Hayes' position with respect to the determination of a reasonable rate. Indeed, the evidence appears to be contrary to the proposition. In a letter dated September 24, 2001, Hayes wrote to Interfor seeking interim heli rates at $90.00 m^3 stating:

> The previous rate for helicopter logging was set at $90/$m^3$ by Arbitrator George Macintosh in his award dated August 25, 2000. We have not agreed to another provisional rate, nor has Interfor applied to vary that rate.

54. Based on the costs records of Hayes, I have determined that the extraordinary mobilization costs amount to $21,545.55, being the product of the agreed volume of 14,859 m^3 and $1.45 representing the difference in mobilization costs not included in my adjustments for the 2001 indicated rate.

55. In addition, Hayes claims the sum of $39,598.73 for booming ground installation. This is based on Hayes' records of actual costs of $34,432.68 incurred in installing the booming ground plus profit and risk at 15%. It does not include costs incurred by Hayes due to the loss of an anchor and, in my view, is reasonable. Interfor's obligation to pay this amount arises out of the Agreement which provides:

> "(d) Dumping and Booming facilities to be:
>
> Provided by the Company and maintained by the Contractor."

56. I also agree with Interfor that the costs of the extraordinary mobilization and the construction of the dumping and booming facilities should not be included in the rate as these are extraordinary items and should not be included in the basis of an agreed or arbitrated rate in the future.

57. In its written submission, Interfor provided a critique of Hayes' costs in performing the 2001 heli-logging operation, highlighting five points:

(a) Hayes' overhead supports a large operation which has been growing significantly in recent years;

(b) Hayes' system of allocating overhead is inequitable;

(c) Hayes' direct costs are unreasonable when compared with the costs estimates of the experts;

(d) the audit was a financial audit and not an audit of allocation of costs to each phase;

(e) Hayes' claim for overhead and risk of 15% on costs is unreasonable.

58. While these criticisms might be appropriate to consider if I were basing my assessment of a rate on the reasonable cost/profit approach, that is not the approach I have adopted. It is correct to say that I have relied on Hayes' costs records for the purposes of adjusting the 1999 rate to reflect an appropriate rate for 2001, however, this is not a cost-based assessment *per se*. Further, to the extent that Hayes' costs records were used to form the basis of the 1999 rate, the criticisms raised by Interfor are not relevant as the rate set by Arbitrator Macintosh is not being re-litigated.

59. With respect to overhead, to the extent that it is built into the 1999 rate, it is apparent from the Macintosh Award that it incorporates overhead on a per unit basis using in excess of 29,000 m^3 of helicopter logging performed in 1999 in a year when 88,525 m^3 was harvested by Hayes on TFL 10. The effect of these volumes is to dilute the overhead costs as a component of the 2001 rate, given the dramatically lower volume of 14,589 m^3.

60. Remembering that the rate to be determined is prospective, this allocation is not inappropriate given that it was anticipated that 27,000 m^3 would be heli-logged in 2001, a volume very similar to that which was logged in 1999.

CHECK AGAINST EXPERT OPINIONS

61. The opinions of the experts were difficult to compare because of the different methodologies and assumptions used.

62. Hayes called expert evidence from Kevin Davie whose opinion of the calculated cost for 2001 heli-logging, including overhead at 15%, was $93.02 m^3. This opinion included adjustments for minor errors and the agreement on volume reached by the parties on the first day of the hearing. His opinion was based on a tour of the logging blocks and his assessment of the yarding productivity, flight path and other operational logistics from which he prepared his own estimate of costs.

63. James Mitchell, an expert called by Interfor, undertook a site visit of the location of the operations both before and after the logging took place and prepared a cost assessment using IWA rates, estimated productivity levels and helicopter rental rates. He allowed 5% profit and risk on heli-yarding and 12 to 15% on all other costs arriving at an opinion that a reasonable rate for the 2001 helicopter logging operations would be in the range of $70.59 to $71.01.

64. Siggi Kemmler provided his opinion, on behalf of Interfor, from the perspective of a contractor seeking to bid for the work. This was based on his assessment of productivity and his plan to sub-contract certain phases of the work to non-union contractors. For profit and risk, Mr. Kemmler assumed the sub-contracts would include a 7% margin and added an additional 7% as the general contractor. He would have bid the work on B-3 and B-4 at $68.88 m^3 and $72.42 for C-1.

65. Both counsel embarked upon a process of adjusting the assumptions of each expert to effect a re-calculation of their proposed rates. I did not find this exercise to be particularly helpful given the subjective nature of each expert opinion. For the most part, these adjustments were not put to the experts in cross-examination and, in the end, became an exercise based on a mix and match of assumed and actual costs and productivity elements which could not be directly related to the professional opinion of the expert witnesses.

66. For the most part, Mr. Davie's evidence held up well in cross-examination and even with adjustments proposed by Mr. Harris, which I considered valid, during his cross-examination, his rate tended to support the rate derived from the 1999 land drop rate.

67. Mr. Mitchell did not prepare his own assessment of the costs for helicopter yarding, relying on an estimate provided by a third party. That estimate process was not documented and could not be analysed for reliability. In addition, Mr. Mitchell's assessment of profit and risk was low and inconsistently applied to cost elements.

68. Mr. Mitchell was mistaken about the prevailing winds and their direction during the operation and assumed an incorrect flight path with the effect that flight efficiencies were over-estimated.

69. Mr. Kemmler's assessment was based on non-union rates when the contract in question clearly contemplates an IWA project (see paragraph (m) at page 3 of the Contract). Section 25 of the Regulation calls for a rate "according to what a licence holder and a contractor acting reasonably in similar circumstances would agree as a rate ...". Those circumstances must include the fact that this was a union operation.

70. Like Mr. Mitchell, Mr. Kemmler mis-apprehended the prevailing winds and, as a result, his flight paths and turn times were shorter than would have been the case. In addition, his allocations for profit and risk, payroll and loading costs as well as fuel rates were low.

71. On the question of overhead, Mr. Kemmler assumed that he could keep the overhead to $9,000 per month based on his experience with the "small company" he operates and not what would be required by a logging contractor sufficiently capitalized and organized to perform the Contract. There is no evidence that Mr. Kemmler's "little company" was anywhere close to the "similar circumstances" referred to in s. 25.

72. Considering the evidence of all of the expert witnesses, I find that the opinion of Mr. Davie corroborates the indicated rate of $87.77 while the opinions of Messrs Mitchell and Kemmler do not detract from it.

INTEREST

73. I was advised during the course of the hearing that interim payments have been made by Interfor to Hayes in respect of the 2001 logging which took place. It is my understanding that the interim rates paid were less than the rates which I have awarded in this arbitration

and that those payments were made on dates later than would normally be the case under the Contract. The terms with respect to payment under the Contract are as follows:

> Terms of Payment:
>
> Ninety percent (90%) of the contract rate on the estimated volume and within five (5) days of receipt of the "Boom report" and the balance within ten (10) days of receipt of the M.O.F. Official S&R Accounts.

74. For the purposes of the estimated volume for the calculation of interest, I suggest that the parties use the actual volume of 14,859 m^3. I do not have evidence of the dates on which Interfor received the boom reports but understand from the evidence of the water scaler Dave Skipsey that such reports were issued daily. I also assume that a date can be established for the receipt of the M.O.F. Official S&R Accounts with respect to this work. Interest will be calculated from the dates payments were due to be paid pursuant to the Terms of Payment noted above.

75. As to the applicable rate, the Rules of Procedure for Domestic Commercial Arbitration of the British Columbia International Commercial Arbitration Centre provides at Rule 37:

> 37. On the basis of evidence presented, the arbitration tribunal may order simple or compound interest to be paid in an award.

76. *Kelly Douglas & Co. v. 331750 B.C. Ltd.*, [1994] B.C.J. No. 490 (B.C.C.A.) and *Westcoast Transmission Co. Ltd. v. Majestic Willey Contractors Ltd.* (1982), 139 D.L.R. (3d) 97 (B.C.C.A.) hold that an arbitrator has the power to award pre-award interest and recommends that an arbitrator take into account statutory provisions such as the *Court Order Interest Act*, R.S.B.C. 1996, c. 79. That act directs at s.1(1):

> ... a Court must add to a pecuniary judgment an amount of interest calculated on the amount ordered to be paid at a rate the Court considers appropriate in the circumstances from the date on which the cause of action arose to the date of the order.

77. In this arbitration, I heard evidence from Donald Hayes that the claimant paid interest on its borrowings during 2001 at the average rate of 7.2%. Had Interfor paid the full amount

on a timely basis, those borrowings would notionally be reduced as would be the costs of borrowing. Accordingly, I consider it appropriate in these circumstances that Interfor pay simple interest at the rate of 7.2% per annum on the shortfall and late payment of the amounts due for the 2001 helicopter logging based on the rate of $87.77 calculated from the dates established by the terms of payment set out in the Contract. If the parties are unable to agree on a calculation of interest, I reserve jurisdiction to set the amount.

78. Part 2 of the *Court Order Interest Act* deals with post-judgment interest and directs that a pecuniary judgment bear simple interest from the later of the date of pronouncement or the date is payable under the judgment. Post-judgment interest is presumptively set at the prime lending rate of the bankers to the government. However, s. 8 enables the Court to vary the rate where it is considered appropriate. In my opinion, the award of interest in arbitrations under the Regulation are intended to be consistent with commercial reality. In that event, it would not be appropriate to adhere strictly to the practice in awarding interest at Registrar's rates and under different regimes depending on whether it is pre- or post-award interest as was urged by Counsel for Interfor. If the parties had agreed on a rate and the logging had been performed, the full amount would have been paid on a timely basis. This did not occur and, in my opinion, it is appropriate to award interest at 7.2% to the date of payment.

79. Interest is payable on the award for extraordinary mobilization costs of $21,545.55 and booming ground installation of $39,598.73 from September 30, 2001 to the date of payment at the rate of 7.2% per annum simple interest.

SHORTFALL CLAIM

80. As stated earlier in these reasons, the parties agreed that Hayes logged a volume of 14,859 m^3 in 2001. Hayes maintained that under the Contract it is entitled to a minimum annual volume of 24,452 m^3 and that Interfor breached the Contract by failing to provide 9,593 m^3.

81. The first issue to be decided on this claim is whether Interfor is contractually obliged to provide Hayes with a minimum annual volume of 24,452 m^3 under the Contract. I have

decided that it is not and, as a result, it is unnecessary for me to consider Interfor's alternative defences or the measure of damages.

82. As noted earlier, this claim relates to the 2001 logging which is governed by the contract which replaced the Contract which expired on December 31, 1998.

83. The Regulation enacted effective April 1, 1996 mandates that:

> 18 (1) **Except as otherwise provided** in this Part, **the amount of work specified in a replaceable contract** that pertains to a licence for the coastal area, other than a dedicated phase contract or a volume independent contract, **must be expressed as** the amount of work required to process an amount of timber where the amount of timber is expressed as **a specified percentage** of the total amount of timber processed by the licence holder under the licence in that year. [emphasis added]

84. The Regulation provides "otherwise" at s. 18(8) which states:

> Amount of work for coastal contracts
>
> (8) If, on or after April 1, 1996,
>
> (a) a holder of a licence for the coastal area, and
>
> (b) each contractor with a replaceable contract that relates to timber harvesting operations carried out under that licence,
>
> agree, the amount of work provided for in any or all of the replaceable contracts referred to in paragraph (b) may be specified in a manner different from that required under this section.

A specific minimum volume would be an expression of the amount of work in a different manner.

85. A previous dispute between the parties concerning the specified amount of work to which Hayes was entitled under the Contract was resolved by arbitration. In his award dated September 15, 1998, Arbitrator Wood decided:

(a) that the 1990 contract was replaced by a replacement contract with an expiry date of December 31, 1998 and that that contract was entered into "sometime after the third anniversary of that contract" and apparently sometime in 1993 as is apparent from the following extract from his award:

> The fact that the terms of the replacement contract appear to extend beyond the five years provided for in paragraph (a) of the 1990 contract is explained by the fact that the suspension of logging under TFL 10, due to the dispute between the Klahoose Band and the Ministry of Forests, was obviously anticipated at the time the letter of October 26, 1993 was written. Under that theory, the "addendum" referred to in the letter would be a reference to the replacement contract, the length of which would be explained by the anticipated application of the proviso under paragraph 1 of the Memorandum of General Terms and Conditions.

(b) that the amount of work to which Hayes was entitled under the replacement contract to which the parties were bound, expressed as a percentage of the total amount of timber processed by Interfor under TFL 10 in any given year of the existing contract, was 100%.

86. This was not the only provision of the Contract then in existence concerning amount of work. Paragraph (b) of the agreement provided:

> b) timberlands to be logged are:
>
> As directed by the Company within Tree Farm Licence No. 10. The Annual Volume will be 150,000 m^3

87. I am advised by counsel that the 150,000 m^3 figure was amended to 48,903 m^3. This term was considered in another arbitration between the parties concerning the 1998 logging year during which Interfor assigned no annual volume to Hayes on TFL 10. In that arbitration, Hayes alleged that Interfor had breached the Contract by failing to provide it with the minimum annual volume of 24,452 m^3 in 1998. In the liability phase of that arbitration, Abitrator Macintosh dealt with the issue as to whether Interfor was

required to allocate work to Hayes in 1998 and whether Interfor breached the agreement by failing to allocate any work that year.

88. Arbitrator Macintosh relied on the term of the then existing agreement, quoted above, in holding that it obligated Interfor to ensure that the "annual volume" was at least 24,452 m^3." In a subsequent award dated August 25, 2000, Arbitrator Macintosh assessed the damages for the breach of contract on the 1998 shortfall claim at $451,535.00.

89. The Contract in question in this arbitration is a replacement of the contract considered by Arbitrator Macintosh. The "amount of work" provisions of the Contract are governed by Division II of the Regulation and, in particular, s. 18(1) which requires that the amount of work in coastal contracts must be specified as a percentage unless the parties agree pursuant to s. 18(8) to specify the amount of work in a different manner, such as a minimum volume. As no such agreement has been reached by the parties, I conclude that the amount of work specified in the Contract governing the relationship in 2001 is specified only as a percentage, in this case, 100% of the total amount of timber processed by Interfor under TFL 10 in each year. This is so because s. 13(1)(b)(iv) of the Regulation requires that the replacement contract "be on substantially the same terms and conditions as the contract it replaces."

90. I have not lost sight of the fact that the replaced contract contained a minimum volume term. The Legislature has mandated, effective April 1,1996, that coastal contracts must specify the amount of work as a percentage unless the parties agree "on or after April 1, 1996" to express the amount of work in a different manner. Absent an agreement after that date, it is my opinion that s. 13(1)(b)(iv) must be read subject to s. 18(1) which requires the amount of work to be expressed as a percentage.

91. Absent an agreement expressing the amount of work in absolute terms, it cannot be said that Interfor has breached the agreement by allocating only 14,859 m^3 in 2001.

COSTS

92. The parties have asked that I reserve jurisdiction on the issue of costs pending the delivery of this award. If the parties are unable to agree on the matter of costs, arrangements may be made to re-convene to deal with that issue.

SUMMARY

93. The appropriate rate to be paid to Hayes for logging services provided in 2001 namely, 14,859 m^3 of helicopter logging, is $87.77 per cubic metre.

94. Interfor shall pay simple interest at 7.2% per annum on the difference between the amount determined by the rate awarded of $87.77 per cubic metre and the rate paid on an interim basis from the date payments were due pursuant to the Contract until the date of payment.

95. Interfor shall pay the sums of $21,545.55 for extraordinary mobilization and $39,598.73 for booming ground installation together with simple interest at 7.2% per annum on these amounts calculated from September 30, 2001 to the date of payment.

96. Hayes' claim for damages for the shortfall claim in 2001 is dismissed.

97. I reserve jurisdiction to deal with any issue arising out of the calculation of interest and further with respect to the issue of costs.

This is my award.

Dated this 14th day of November, 2002 at Vancouver, British Columbia.

Murray A. Clemens, Q.C.