

PRACTICAL COMPLETION FOR WATER SUPPLY PROJECTS

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To Ijah, Khairul and Rina.

Thank you for your support, love and encouragement.

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ABSTRACT

Practical completion is a term used in the construction industry and many standard forms of contract to denote completion of the works by the Contractor. The law and practices in relation to the completion of building and engineering projects are complex issues that often give rise to conflict. There are only a few law cases that give guidance to practitioners. It seems that the meaning of practical completion is still not settled although the phrase has been used and found in many standard forms over the decades. This present the construction industries with uncertainty as to its exact meaning, leaving it open to various interpretations. The aim of this study is to determine legal meaning of practical completion and to develop a guideline that can assists in certifying practical completion particularly for water supply projects. For determining the legal meaning, the study focused on courts' decisions in defining the terms of completion of works, provision in the standard forms, commentary from the learned authors and the practicalities of construction works itself. A guideline for certifying practical completion of water supply projects has been developed based on the issues found from the analysis of a few samples of completed water supply projects, practicalities and guided with the legal meaning as suggested. Based on the study, the writer suggested that the correct legal meaning of practical completion is **“Practical completion occurs when the Works has reached such a stage of completion that they are capable of being occupied or used by the Employer for the purpose for which they are apparently required and intended, notwithstanding the presence of minor outstanding works and trivial defects”**. From the proposed definition, it means that, for the Contract Administrator to exercise his opinion, what has to be considered is a particular criteria rather than an abstract and undefined concept; and the actual use of the works by the employer for the required purpose or intended will be prima facie evidence that the criteria has been met, regardless of the presence of minor outstanding works or trivial defects. It would thus be beneficial to the contracting parties if an unambiguous definition and guideline for certifying of practical completion is provided in the contract document. The Contractor may plan the works based on the intent of the contract so that principal areas will be ready for occupation or use by the due date for completion and some less critical outstanding works may be completed during the defects liability period.

ABSTRAK

Penyiapan Praktikal adalah satu terma yang digunakan dalam industri pembinaan dan kebanyakan borang kontrak standard yang merujuk kepada penyiapan kerja oleh kontraktor. Undang-undang dan amalan berhubung penyiapan bangunan dan projek-projek kejuruteraan adalah satu isu yang kompleks yang biasanya menimbulkan konflik. Terdapat hanya beberapa kes perundangan sahaja yang memberi petunjuk kepada pengamal-pengamal. Maksud penyiapan praktikal masih lagi belum dapat diputuskan walaupun frasa tersebut telah banyak digunakan dalam borang kontrak standard sejak dahulu lagi. Ini menyebabkan industri pembinaan menghadapi situasi yang tidak jelas tentang makna dan maksud sebenar terma tersebut yang mendorong kepada pelbagai interpretasi tersendiri. Kertas penyelidikan ini adalah bertujuan untuk menentukan maksud perundangan bagi penyiapan praktikal dan untuk menyediakan garis panduan yang dapat membantu dalam mengesahkan penyiapan praktikal khususnya untuk projek bekalan air. Untuk menentukan maksud sebenar dari segi undang-undang, kertas penyelidikan ini telah memberi tumpuan kepada keputusan –keputusan mahkamah dalam mendefinisikan terma penyiapan praktikal, peruntukan dalam borang kontrak standard, ulasan dan komen dari penulis yang bijaksana dan kemunasabahan kerja-kerja pembinaan itu sendiri. Satu garis panduan untuk mengesahkan penyiapan praktikal didalam projek bekalan air akan disediakan selaras dengan isu-isu yang dibangkitkan dari analisa-analisa yang diambil dari contoh-contoh projek yang telah siap, kemunasabahan kerja-kerja pembinaan bekalan air dan dibantu oleh maksud perundangan yang disarankan. Berdasarkan kepada penyelidikan ini, penulis berpandangan bahawa, maksud perundangan sebenar bagi penyiapan praktikal adalah **“Penyiapan praktikal berlaku apabila kerja-kerja telah sampai kepada tahap penyiapan yang mana ianya boleh diduduki atau digunakan oleh majikan bagi tujuan yang mana ianya secara jelas diperlukan dan dimaksudkan, tanpa mengambil kira kehadiran kerja-kerja kecil yang masih belum disiapkan dan kecacatan yang tidak mustahak”**. Dari definasi yang dicadangkan ianya bermaksud bahawa Pentadbir Kontrak hendaklah membuat pertimbangan dengan menggunakan kebijaksanaannya, terhadap kriteria-kriteria tertentu dan bukannya konsep yang abstrak dan yang tidak dijelaskan; dan kegunaan dan tujuan sebenar kerja-kerja tersebut dibina oleh pihak majikan telah berjaya dihasilkan akan menjadi bukti-bukti *prima facie* bahawa kriteria tersebut telah ditepati, tanpa mengambil kira kehadiran kerja-kerja kecil yang masih belum disiapkan dan kecacatan yang tidak mustahak. Oleh yang demikian, untuk memberi munafaat kepada pihak-pihak berkontrak disarankan satu definasi yang jelas dan garis panduan untuk mengesahkan penyiapan praktikal disediakan di dalam dokumen kontrak. Pihak kontraktor boleh merancang kerja-kerja berdasarkan kepada intipati sesuatu kontrak supaya bahagian kerja utama atau penting telah siap sedia dan boleh digunakan tepat pada waktunya dan mana-mana kerja remeh-temeh yang masih belum disiapkan mungkin boleh disiapkan di dalam tempoh tanggungan kecacatan.

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LIST OF ABBRIEVATIONS

CIDB	-	Construction Industry Development Board Malaysia
DB/T	-	Design & Build / Turnkey
IEM	-	Institution of Engineers Malaysia
JCT	-	Joint Contracts Tribunal United Kingdom
PAM	-	Pertubuhan Arkitek Malaysia
P.D.	-	Project Director
PWD	-	Public Works Department Malaysia
SAJ	-	Syarikat Air Johor Sdn Bhd
SAJH	-	SAJ Holdings Sdn Bhd.
S.O.	-	Superintending Officer

CHAPTER 1

INTRODUCTION

1.1 Background of the study

The law and practices in relation to the completion of building and engineering projects are complex issues that often give rise to conflict. There are only a few law cases that give guidance to practitioners. Moreover, there are considerable numbers of different approaches to the certification of completion in standard forms of contract.

Generally, full and complete performance is required to discharge contractual obligations. Humphrey Llyod QC in *Babcock Energy Ltd v Lodge Stutevant Ltd*¹ held that completion of a contract normally means the discharge of all contractual obligations including the liability for payment of damages for breach of a primary obligation. This is a strict view of the concept of completion.

The completion of an obligation by the contractor will usually mark the transfer of certain risks or the crystallisation of certain rights. The term completion may therefore

¹ (1994) 41 CLR 45.

have a number of different meanings in a contract, depending upon the obligation. For example, completion for the purposes of payment may differ from that of defining the end of the construction stage, which in turn may differ from that of defining the end of the defects liability period.

However in construction contracts, the purpose of signifying completion of work is not to release the contractor, but to permit the employer to take possession of the work and to allow the contractor to leave the site².

Practical completion³ or substantial completion is a term used in the construction industry and many standard forms of contract to denote completion of the works by the Contractor. The time between the date of commencement and the date for practical completion is the time taken to complete the works. Any attempt to describe a contractor's obligation to complete his works within the time stipulated in the contract must assume that there is a basis to ascertain whether the particular works have reached a state of completion. The typical expression used in construction contracts for this purpose is practical completion and it distinguishes the state of the works from that at final completion. This distinction allows for minor outstanding or defective works, which do not detract from the enjoyment or utilisation of the facility to be completed or rectified notwithstanding that the employer had taken over and started to use the facility⁴.

The Contract Administrator usually certifies the Practical Completion when he is satisfied that the contractor has performed and completed all the works specified in the contract. The certificate is usually called "Certificate of Practical Completion"⁵.

² Uff, J. "Construction Law", 8th Edition (London: Sweet & Maxwell, 2002), p 283.

³ PWD 203A/203 CI 39(b), IEM CI 39(b), PAM CI 15.1, PWD Form DB/T CI 41.2, CIDB CI 20.2 (b)(i).

⁴ Chow, K.F. "Law & Practice of Construction Contracts", 3rd Edition, (Asia: Sweet & Maxwell, 2004), p 382.

⁵ PWD 203A/203 CI 39(b), IEM CI 39(b), PAM CI 15.1, PWD Form DB/T CI 41.2, CIDB CI 20.2(b)(i).

The issuance of “Certificate of Practical Completion” is an important project milestone and triggers the following⁶:

- The date stated in the Certificate of Practical Completion marks the end of the contractor’s liabilities in respect of his contractual obligations except his liability to make good defects that occur during the Defects Liability Period.
- One moiety of the retention fund has to be released to the contractor.
- The date of practical completion marks the commencement of the Defects Liability Period.
- Sets the date for the beginning of the period of final measurement and valuation.
- The contractor’s liability to insure ends and the employer then assumes the risks.
- The contractor’s liability to liquidated damages (if any) ends.
- The end of restriction on the opening of arbitration on most matters.
- The contractor is to send to the architect all documents necessary for the adjustment of the Contract Sum within six months after the date of practical completion.

The standard forms adopt different procedures for the identification of completion of works. Provision on practical completion can be found under the following clauses in the local standard form;

- PWD 203/203A (Rev.1/83), Clause 39 – Completion of Works.
- PWD DB/T 2002, Clause 41 – Completion of the Works.
- IEM 1989, Clause 39 – Completion of the Works
- PAM 1998 Clause 15 – Practical Completion and Defects Liability.
- CIDB 2000, Clause 20 – Time for Completion.

⁶ Rajoo, S. “The Malaysian Standard Form of Building Contract (The PAM 1998 Form), 2nd Edition, (Kuala Lumpur : Malayan Law Journal Sdn Bhd, 1999), p 141.

1.2 Statement of problem

Most of standard forms used throughout the construction industry except perhaps the PAM 1998 and CIDB 2000, do not define the term completion of the works. This present the construction industries with uncertainty as to its exact meaning, leaving it open to various interpretations. Professor Wallace in *Construction Contracts: Principles and Policies in Tort and Contract (1986)*, Sweet & Maxwell at p 519, considers this omission in the JCT 1963 Form as extraordinary⁷.

The term “practical completion” in construction contract has been around for a long time and it is still remarkable, in view of the frequent occasions upon which it is the subject of dispute, and which it is still has no firm legally defined the meaning. The meaning of words such as these, incorporated in a contract, is actually a question of law. The meaning of practical completion has caused difficulty in practice and in the courts partly because the word is not defined in the contract⁸.

Construction contracts involve the fixing and incorporation of the works on land, with the consequent transfer of ownership. The owner or employer is therefore likely to receive substantial benefit even if the works are not entirely complete. The doctrine of substantial performance mitigates the harshness of the rule that if work is completed but not in accordance with the contract no payment is due⁹ and allows the contractor payment for work if substantially completed with an allowance for defects. It is a question of fact whether the contractor has substantially performed his obligations. The contractor cannot rely on the doctrine to seek payment for work carried out if he has abandoned the works¹⁰. It applies where the work has been completed except for minor defects or minor outstanding works.

⁷ Ibid.

⁸ Ibid, p 142.

⁹ Bolton v Mahadeva (1972) 1 WLR 1009.

¹⁰ Sumpter v Hedges (1898) 1 QB 673.

The requirements of completion in relation to a time obligation are likely to be different than for the obligation for payment, particularly when the contract makes provision for the contractor to remedy defects and/or outstanding work in the defects liability period. So for instance, occupation by the Employer may be good evidence of completion for payment purposes but it will not necessarily be relevant evidence of completion of the time obligation¹¹.

When the work or part of it is “practically complete” the contractors would want to hand it over to the employer so that he can ask for the release of final payment, so as to diminish his outstanding obligations and so that the employer can assume responsibility for subsequent insurance. The Contract Administrator, on the other hand, does not want to take over anything at all until he is satisfied that the contractor has completed everything properly. At this juncture all the provisions in the condition of contract as stated above become subject to scrutiny and the most difficult arguments centre on the question, “Is it practically completed or not?”. As previously stated, the meaning of practical completion has caused difficulty in practice and in the courts partly because the word is not defined in the contract. As such, whether or not the works are ‘practically completed’ is a matter of the opinion of the Contract Administrator.

Based on the writer’s 15 years’ involvement in managing water supply projects and contracts, the issues on whether the work is complete or not has always become a subject matter. Different Contract Administrator has different views on the definition of practical completion. At what stage of completion of work can you issue Certificate of Practical Completion? To what extent does the outstanding work or types of defects hinder the practical completion? Do we have any standard assessment criteria or guidelines for certifying completion of the works?

As such, it only stands to reason that it would serve the parties better if all involved knew what is meant by practical completion. It would thus be beneficial if an unambiguous definition, critical areas and elements of works that should be necessarily

¹¹ Impresa Castelli SpA v Cola Holdings Limited (2002) 87 CLR 123

complete for the purpose of practical completion are provided in the contract document. And, if the extent of the works that should be complete for the purpose of practical completion is less rigorous, this could perhaps lead to lower prices.

1.3 Objective of the study

The objectives of the study are as follows:

1. To determine legal meaning or definition of practical completion of works based on cases of law.
2. To develop a guideline that can assist in certifying practical completion for water supply projects.

1.4 Scopes and Limitation of the Study

This study will focus on courts' decision in defining the terms of completion of works based on cases of law reported. There is no limit in the cases chosen in terms of period.

Standard form of contract to be analysed is limited to PWD203/203A, PWD DB/T, IEM, PAM and CIDB only. Some comparisons to other standard forms will be made if required.

For the analysis of completed water supply projects, the study will be made on sample of projects carried out by SAJ Holdings Sdn Bhd as one of the leading water supply providers in the country.

1.5 Significance of the Study

The conclusion or finding of this study will determine the preferred legal meaning of practical completion of works and to develop a guideline that can assist in certifying practical completion of the works for water supply projects.

This unambiguous definition of practical completion and guidelines provided in the contract document will assist the contracting parties to understand their rights and obligations related to completion of works. The Contractor may then plan the works based on the intent of the contract so that principal areas will be ready for occupation by the due date for completion and some less critical outstanding works may be completed during the defects liability period. There may be situations where the Employer cannot use completed areas because 'practical completion' is different from 'substantial performance'. In the latter case a party who is not even in full compliance with the entire terms of the contract may be entitled to recover the contract amount less the value of incomplete works, assuming that the latter are minor in nature and do not substantially affect the usage of the product.

Besides that, if the extent of the works that should be completed for the purpose of practical completion is less rigorous, this could perhaps lead to lower prices. Lastly, when the parties are clear about their rights and obligations, it can help to avoid disputes.

1.6 Research Methodology

A systematic of research process or approach has been adopted to achieve the objective of study. Generally, this research process covers four stages, which involves identifying the research issue or problem, develop research structure and research design, data analysis, and writing up of research.

1.6.1 First Stage: Identifying the Research Issue

The most important step in research is identification of the research issue or problem. Normally, the issue is established by reading the various related materials in journals, articles, books and discussion with the related parties within the industry. Based on the research issue, the objective and scope of the study has been identified.

1.6.2 Second Stage: Develop research structure and research design

After setting out the area of study, research structure and research design have been developed. Types of data and information need to be collected and method or techniques of research used have been identified at this stage. The court cases are collected from the electronic database: Lexis-Nexis Legal Databases. The data collected consists of cases from Malaysia Law Journal and other commonwealth jurisdiction namely United Kingdom, Australia, and Hong Kong etc.

A few samples of water supply projects completed by SAJH will be identified and the data and information related to completion of works will be gathered.

Other information is gathered such as through readings of books, standard form of contracts, annual report, journals, articles, manual and discussion with practitioners.

1.6.3 Third Stage: Analysis and synthesis of data and information

The courts' decision and provision in the standard form will be analysed and synthesized in order to determine the preferred legal meaning of practical completion of works.

Issues found and practicalities of completion of water supply projects will be analysed. Guided with a suggested legal meaning, then a guideline will be developed for certifying practical completion of works for water supply projects. A discussion with the practitioners will be conducted to seek their views on the proposed guideline.

1.6.4 Fourth Stage: Writing up of research.

The whole research process will be thoroughly assessed to identify whether the research objectives have been achieved. After that, writing up of research will be made

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For water supply projects, alternatives may include supply approaches such as expanding an existing reservoir or intake, purchase from another system, or reuse; or demand management approaches such as instituting more comprehensive efficiency measures. Non-structural approaches to addressing supply needs such as efficiency measure implementation should be considered as part of needs and alternatives analysis to evaluate opportunities to avoid or minimize impacts to aquatic resources. These should be considered modular elements of an integrated planning approach that optimizes re-. Best Pract BOOK OF BOREHOLE DESIGNS A selection of practical construction recommendations for water supply boreholes Peter Ball Porphol Yamchinda Introduction are long established designer and promoter of appropriate.Â Download "A selection of practical construction recommendations for water supply boreholes". Error: Download Document. Water supply from natural resources: Define the following words and illustrate with pictures from the web:
â† Aquifer â† Impermeable Rock â† Reservoir â† Spring â† Water Table â† Well 1. Where have the most densely populated areas settled down over the past years? Why? Name cities with rivers flowing nearby or across them. 2. Wich are the most suitable cities for water supply? 3. Cite favourable geological conditions (page 70). Do activities: Page 69: 2 a and b, 3 a and 4 a. Page 72: 1 a and b.