

The Archival Quality Trademark Scheme for Paper and Board Products

Ian Batterham

Ian Batterham is the Assistant Director, Preservation (Technical) at the National Archives of Australia. He entered the Materials Conservation course at the then Canberra College of Advanced Education with the first intake in 1978, and after completing the course joined the National Archives as an Assistant Conservator. He has worked as a casual lecturer in paper conservation at the University of Canberra and has had a number of papers published, most notably in *Restaurator* on his conservation work on the Walter Burley Griffin Canberra designs. Ian is currently completing a Masters Degree in Conservation at the University of Canberra.

The National Archives of Australia has introduced a scheme aimed at ensuring that archival quality materials are readily available in the marketplace. Central to the scheme has been the creation of a certification trademark which has been registered with Industrial Property Australia with a set of rules relating to the archival quality of the material, setting limits for chemical and physical properties relating to permanence.

Introduction

One of the primary roles of the National Archives of Australia (NAA) is to ensure the preservation of the important records of the Commonwealth government. This role underpins all others. Put simply, if the records don't survive there will not be a National Archives of Australia and an important part of Australia's cultural heritage will be lost.

The task of preservation is often reactive in nature, addressing problems as they develop, such as mending a tear or deacidifying an acidic paper. But preservation can also be proactive and prospective, addressing future problems and looking at ways of stopping them before they can even start. The Archival

Quality Trademark Scheme is in the latter category as an initiative which is aimed at helping to ensure that documents created in the future will require less conservation attention to survive.

The scheme assists this aim by ensuring that archival quality paper and board products are readily available on the Australian market and easily identifiable as being of archival quality, both on purchase and throughout the life of the product.

What is 'archival quality'?

The word 'archival' is used often to describe materials and products. It is not a precise term but in the case of a paper or board product it indicates that the product has a level of chemical stability and physical strength such that it will survive for long periods and cope with a high level of handling.¹

What we are doing when we create a record using archival quality materials is giving the record a good start in life. If a record is created on high quality paper, whatever happens to it over time, it is going to last longer than a document created on poor quality paper under the same circumstances.

Archival quality paper can withstand high temperatures, high humidity levels, atmospheric pollution and rough handling much better than poor quality paper. This means that the future preservation task is greatly assisted and scarce preservation resources can be directed elsewhere.

How long will archival quality materials last?

Conservators are often asked just how long a piece of archival paper will last. This is a very hard, if not impossible, question to answer as there are too many 'unknowables' associated with it.

The degradation of paper typically involves a slow loss of physical strength with associated yellowing. It is very difficult to make a pronouncement about exactly where on this descending line the paper becomes unusable. Also, the speed with which this happens is affected by many factors: environment, handling and of course the quality of the paper. Herein is the difference between an archival paper and a lesser quality paper – for an archival paper this rate of degradation is much, much slower.

The final result of the slow degradation of a paper is paper with no physical strength whatsoever. If you fold it, it will snap. However, even at this point the paper isn't lost, it is simply very delicate. But if it is to be made in any way useful again it requires the intervention of a conservator and, even then, the

best that can be done is to halt the deterioration, reintroduce a little of the original strength and cushion it from further handling. It can never go back to anything like its original strength.

So to reduce the need for future preservation action and to ensure that Australia's documentary history survives, important documents need to be created on the best paper possible – *archival* quality paper. It is of the utmost importance to the NAA that Commonwealth records of enduring value are created using archival quality paper. This is because it is the body entrusted with the task of taking custody of those records selected for retention as 'national archives' and ensuring their survival. It is also the body whose role is to set standards for records creation.

The task of ensuring appropriate paper use is a very difficult one and there are a series of hurdles to be overcome. The first and probably most crucial of these hurdles is ensuring that appropriate and easily recognised archival quality materials are available to people creating records. The trademark scheme has been established to do just this.

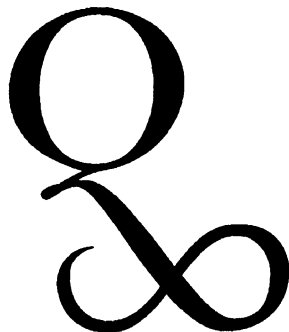
The Trademark Scheme

Central to the new scheme is a certification trademark, which is a trademark which has a set of rules associated with its use. (See the trademark example, right.)

It has been registered with Industrial Property Australia and the associated rules have been cleared by the Australian Competition and Consumer Commission. The trademark rules relate to the archival quality of the material, setting limits for chemical and physical properties relating to permanence. Three of the most important tests are tear strength, alkaline reserve and the photographic activity test.

Tear strength is a test for physical strength and is carried out on fresh paper samples as well as samples which have been artificially aged. It is important that the fresh paper is strong but also that it remains strong over time: accelerated ageing provides the best available method of estimating the effect of time on the strength of paper.

The alkaline reserve test gives a measure of the chemical stability of the product. Acidity is the chief cause of paper degradation, whether from



manufacture or from such things as atmospheric pollution. Papers manufactured with an added quantity of alkaline material can resist acidic degradation and thus last longer.

The photographic activity test (PAT) is aimed at discovering the suitability of the product for storing photographic materials. Photographic materials are very susceptible to damage from even minute airborne traces of various corrosive substances. The PAT test assesses whether a material gives off any of these substances and thus whether it is unsuitable for storage of photographic material.

NATA accreditation

It is necessary to effectively utilise the trademark to be able to verify that products meet the quality levels set out in the trademark rules. As no independent authority in the country was carrying out such work to recognised standards, this task fell to the NAA itself. In order for testing to be considered authoritative the testing facility and procedures needed to be verified by the National Association of Testing Authorities (NATA).

This was a laborious and costly process, involving establishment of a whole 'quality system' which includes creation of a Laboratory Quality Manual, regular calibration of equipment and meticulous recording of all work carried out. NATA check the testing facility and records once a year to ensure that standards are being maintained, and there is also a hefty fee associated with continued accreditation.

How the scheme operates

Any manufacturer who makes a paper or board product, which they believe to be of suitable quality and which they wish to market using the trademark, can submit products for testing. If the product passes the testing, official approval is given to use the trademark, as a watermark or a printed device on packaging or promotional material.

The operation of the scheme is fully described in the rules attached to the trademark which are available from the National Archives website.² The website also contains a list of currently approved products and an Archives Advice giving a general introduction to the trademark scheme.

Since the trademark and rules were officially recognised in early 1999, the NAA has registered 15 paper and board products for testing. Of these we have completed testing five products, of which four have met the standard and been granted permission to use the trademark.

The National Archives' commitment

The NAA is encouraging use of trademark-approved paper and board products for all records which need to be kept for long periods. Ensuring that this actually happens is the second major hurdle in this overall process. In order for it to occur, people creating enduring value documents need to be aware of the need for high quality paper, have access to the paper and actually use it when required. Experience has shown that ensuring these steps are followed is very difficult. Ways of assisting the process include such measures as placing notices above printers and photocopiers alerting people to the appropriate use of different paper types, ensuring that laser printers have separate trays for archival paper, and printing letterhead on archival quality paper.

At the NAA we have introduced a procedure to ensure that all important documents are produced on archival quality paper. We have simply instituted an organisation-wide policy of exclusively using archival quality paper for all internal copying and for printing of letterhead paper. There is a little extra cost associated with this but the long-term benefits will be great – all enduring value documents produced by the NAA will be on archival quality paper.

Relationship to ISO 11108 for permanent paper

The NAA is often questioned regarding the relationship between the archival quality trademark rules and International Standard ISO 11108 for permanent paper. ISO 11108 sets out a standard for a high quality paper, but the trademark rules define a paper of higher quality. Specifically, the ISO standard does not have a requirement relating to artificially ageing the paper and does not include the photographic activity test as one of its required tests. The NAA believes these additional requirements are necessary for paper to be truly of archival quality.

Conclusion

Through appraisal documents may be graded 'national archives', 'permanent' or 'of continuing value' based on their context and information content. However, for such documents to actually survive as long as it is wished for them to survive they also must have a physical base of enduring or archival quality.

The NAA has expended much effort and resources to ensure paper of suitable archival quality is readily available on the market for the creation of records. It also strongly urges all organisations and people producing documentary

material of potentially enduring value to think carefully about their paper usage to ensure that paper quality matches a document's end use – archival papers for archival documents and lesser quality papers, if desired, for short-term documents.

Now that the scheme is operating, papers and boards meeting the requirements of the trademark will be easily recognisable in the marketplace because they will bear the trademark on packaging or as a watermark.

ENDNOTES

1 John N DePew and C Lee Jones, *A Library, Media, and Archival Preservation Glossary*, ABC-CLIO, Santa Barbara, 1992, p. 13.

2 National Archives of Australia, 'Archival Quality Certification Trademark', at www.naa.gov.au/recordkeeping/preservation/aqt/summary.html.