

QUALITY CERTIFICATION REQUIREMENTS FOR LOG AND LUMBER EXPORTERS

Jim

J B Maud

Senior Adviser (Technical)

Market Development, Ministry of Forestry

SUMMARY

This paper discusses the independent certification of export logs and lumber providing assurance that these products meet specified phytosanitary or product quality requirements.

Mandatory certification of *P.radiata* and *D.fir* logs exported to the United States of America is covered together with mitigation procedures required before export and during processing at destination ports.

Discretionary certification to agreed minimum industry standards for markets where no phytosanitary requirements need to be met is discussed also.

INTRODUCTION

Most countries importing forest produce apply inspection and sterilisation procedures at the border to prevent the entry of pests and diseases which may threaten trees or timber in use.

Rather than just treat infected forest product at the border on arrival many countries now require specific phytosanitary conditions to be met prior to export from the country of origin. These arrangements and the provision of certification that conditions and procedures have been met usually result from Government to Government agreements. For such arrangements to work properly it is essential that industry representatives are involved during the preparation of these agreements and can later promote management practices during the production and export phases to

ensure agreed requirements are constantly met with the least cost.

Quality management systems are a proven way of consistently meeting such objectives.

It is probably useful at this stage to explain what is meant by quality and certification in the context of this paper.

WHAT IS QUALITY?

Quality is what you expect in a product or service and are entitled to receive. It concerns:

- ◆ fitness for purpose)
- ◆ reliability) Specification
- ◆ availability)
- ◆ value for money)

For either logs or lumber this can mean specifications that the product is required to meet for either phytosanitary (plant health) reasons or specifications relating to the product itself. These can include fitness for its intended purpose for example grade or moisture content.

WHAT IS CERTIFICATION?

For the purpose of this discussion certification means the certification of export consignments of forest produce provided by independent organisations such as the Ministry of Forestry. This certification can relate to the Import/Export Regulations 1989, or certification provided at the request of an exporter to meet a certain specification based either on phytosanitary or product specifications or a combination of both.

Certification issued by any organisation or individual recognised by the client as providing sufficient assurance that the exporter has met his defined specification is also used in some instances. For export logs and sawn timber the client can be either an overseas quarantine organisation who has set the phytosanitary standard and seeks independent assurance that these standards have been met or the client can be the recipient of the logs or lumber who is seeking assurance that the product specification for say log lengths or timber treatment retentions are met.

WHAT ARE THE REQUIREMENTS FOR CERTIFICATION?

*End pt. inspections
Quality Management Systems
Certification based on audit
Cost Effectiveness
Minimising Waste*

Export certification requirements can be for either plant health or product quality and sometimes a combination of both.

Until just a few years ago the Ministry of Forestry provided certification based on end point inspections of log and lumber to overseas phytosanitary or border entry requirements.

However where exporters have adopted formal quality management systems based on the ISO 9000 series of standards, these systems can assist Managers to meet phytosanitary specifications throughout the production process. Certification can therefore be based on occasional systems audits by MOF together with a consignment check at the port of export. This procedure is preferred over the less cost effective one of end point final inspection where the product is inspected after manufacture and rejected along with a large slice of profit when specifications are not met.

The world markets for logs and lumber can be divided broadly into two major groups. The first, markets requiring government certification that export the product meets specific phytosanitary conditions laid down by the government agency in the country of importation, for example the USA, and the second group of countries where no such

requirement exists at all such, as Japan and Korea.

The specifications relating to product quality or fitness for intended purpose are most likely to be agreed to between the supplier and the purchaser of the product and are more commonly applied in quality management systems by manufacturers.

Within the forest industry the specifications certified therefore could range from the selection of decay and pest free trees and lumber, removal of bark, application of insecticidal and fungicidal sprays, fumigation to compulsory prescriptions with gases such as methyl bromide, treatment of lumber with preservatives such as CCA and boron chemicals, to log lengths, timber sizes, moisture content and grade requirements.

*Border entry requirements
cost to Govt. recipient
Pre-export requirements
part of Arrival requirements
Post-entry requirements
Consignment identity requirements*

MANDATORY CERTIFICATION

Those markets where mandatory phytosanitary certification of forest product is required, usually as a result of Government to Government agreements, have strict examination procedures applied to consignments on arrival. Such arrangements can also require as with P.radiata and D.fir logs exported to the United States of America, post entry mitigation procedures applied during processing and transportation in an effort to minimise the possibility of introducing fungi and insects. To illustrate this point let us examine the requirements for exporting logs to the United States (contact the Ministry of Forestry for full certification and mitigation requirements).

Before export from New Zealand P.radiata and D.fir logs must be:

- Perishable Requirements*
- given a permit of approval to import by The American Plant Health inspection Service, (APHIS)
 - felled, transported, loaded on board ship and fumigated within 45 days
 - selected from disease and insect free trees

- mechanically debarked (followed by spraying with a fungicidal and insecticidal solution which is optional but strongly recommended by US authorities)
- stored below deck only or in enclosed containers as deck cargo
- fumigated with methyl bromide in the ship's hold or container then officially sealed.

Advance notification of the shipment must be made to the US State Plant Protection Quarantine Officer in Charge at the destination port seven days before the shipment arrival. The following must be supplied at this time:

- number of permits authorising importation
- consignees name
- importers name
- carrier name, shippers marks and numbers
- estimated date of arrival
- size of shipment
- species of log
- country of origin
- destination sawmills.

Port of Arrival Requirements

On arrival at the US port the following requirements apply:

- logs must be presented for inspection
- segregation of logs from all other forest produce
- verification that mitigation measures required in NZ have in fact been applied
- transportation from the port of first arrival to the processing plant is to be by the most direct route possible.
- logs must be processed to final sterilised products within 60 days of arrival in the US.

Port Entry Requirements

During processing in the US the following measures apply:

- processing plants must be approved by State Plant Protection Quarantine staff before processing commences

- log products including by-products and waste must be heat sterilised at 56°C for 30 minutes, in the case of wood less, within the 60 days of importation.
- by-products such as chips must be moved from the approved site to another approved site in covered transport and be processed within the 60 days from importation.

It is clear from the above summary that strict compliance with the set requirements for logs prior to export from New Zealand is essential together with appropriate certification in this case by the Ministry of Forestry, that the stated compliance measures have in fact been met by the exporter.

When elaborate measures need to be met as with exporting logs to the US it is desirable that written procedures together with delegated staff responsibilities are clearly set out in a manual of procedures or incorporated into existing manuals. The quality systems approach set out in ISO 9000 standards is often chosen by manufacturers to assist in managing such procedures.

DISCRETIONARY CERTIFICATION

*No entry requirements
Exporter-agreed minimum standards
Exporter declaration
Independent certification*

By contrast exporters may voluntarily choose to certify log and lumber exports as meeting agreed minimum standards where the market requires no measures to be met before export. The Japanese and Korean markets are examples of this. Exporters acknowledge however that despite this lack of compulsion some minimum standards are desirable to maintain a level of phytosanitary condition on export and especially where associated product quality can be affected as when decay is present. Certification to industry agreed minimum standards may take place either by the exporter themselves or by independent organisations including the Ministry of Forestry. What ever the minimum standard applied, it is desirable that shipments are certified as meeting this standard helping to

create a positive image for New Zealand radiata pine. What could however be equally or more important is exporters agreeing on a means of assessing the consequences of consignments or pieces within a consignment being below set minimum standards. For logs exported to the US it is quite clear what the consequences would be. For shipment to other markets where no requirements apply it can be debated as to what the effects on species acceptance is. How many insect infested or decayed radiata logs create a negative image in the market? Does a certain low price related grade of log or lumber have greater negative impact on higher value uses than insect holes or decay? Probably a combination of all factors contribute to the real answer. However, an accurate means of assessing each export consignment of logs or lumber against a minimum certified standard and know with reasonable certainty what the short and long term impact of below specification product will have on the market would be a useful tool. This leads to a brief look at an interesting concept.

Zero defects is a concept often talked about in manufacturing circles. In short it means products produced consistently with no defects when compared to a prepared specification.

Some believe it is impossible to achieve; others, including myself, believe it is a worthy goal to aim for even though it may be impossible to achieve in meeting some specifications.

In a recent US article discussing the subject of zero defects the following question was asked:

WHAT DOES 99.9% QUALITY MEAN?

In the US it means:

- one hour of unsafe drinking water per month
- two unsafe landings at O'Hare airport each day
- 16,000 lost pieces of mail per hour

- 20,000 incorrect drug prescriptions per year
- 500 incorrect surgical operations performed each week
- 19,000 new born babies dropped at birth by doctors each year
- 22,000 cheques deducted from the wrong account each hour
- your heart fails to beat 32,000 times each year.

All sobering thoughts really.

THE FUTURE

There is a definite move by quarantine authorities inspecting forest produce in some markets to move as much of the inspection and phytosanitary compliance requirements of imported forest produce off shore to the country of export. A trend which will be followed more and more by other overseas authorities.

Associated certification providing assurance to clients that product quality or phytosanitary specifications have been met prior to export will continue to assume greater importance particularly when formal quality management systems have been implemented by the exporter.

Despite the implications of the above 99.9% quality examples I believe the positive approach to quality New Zealand exporters of forest produce are taking is the correct one and will undoubtedly help to secure the future entry and acceptance of radiata products in overseas markets.