Module 43
Cold Store Handling

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Introduction

Cold stores receive citrus fruit from many different sources. A cold store must have systems in place to ensure that product traceability is upheld, and to ensure that the cold chain is maintained for all the products it handles. One of the most important functions of the cold store is to consolidate the fruit received from the different sources and to ensure that the correct fruit goes to the correct markets.

Cold Store Handling

Cold storage handling is quite an important aspect in the logistics chain. The main aspects of cold store handling are:

- Data capturing
- Pre-cooling
- Planning
- Inspection
- Loading

Each aspect is important and accuracy of such will ensure the product is loaded at the right time, to the right place and in the right condition.

Data Capturing

When a truck is loaded at a packhouse, a consignment note is generated that details the product on the truck. When the truck arrives at the cold store, the data capturer captures the information onto the system.

The tally clerk will then authenticate that the consignment note and the physical load match each other. This is a vital procedure, as it is important to make sure that the correct information is captured to avoid sending the wrong fruit to the wrong market.
If mistakes are found, a discrepancy report is sent to the packhouse so they can then correct the information on their side.

The truck is then offloaded, and the fruit is checked to make sure that the quality of the cartons and the pallets were not damaged during transport.

The information is also sent back to the packhouse if damages were received, and if they are severe, the product is then loaded back on to the truck or otherwise, if it can be repaired, it can be taken of the truck and repaired.

The consignment note is then accepted and the fruit is brought onto stock.

**Pre-Cooling**

Most cold stores have pre-cooling chambers, where the pallets are placed in sealed, forced-air cooling chambers for up to 24 hours to bring the temperature down form ambient to the required holding temperature.

Once the fruit is at the required temperature, it is then transferred from the pre-cooling chamber to the holding rooms. The fruit is then grouped in the holding room by market and by commodity. This makes the retrieval a lot easier when the fruit is required to be loaded out.

**Loading**

When an export agent has confirmed the shipment of fruit to an overseas buyer, and the arrangement for shipping has been confirmed, a load out instruction is issued to the dispatch planner at the cold store at least 48 hours before the shipment. The dispatch clerk then captures the required pallets to be loaded out and creates a dispatch document.

Each shipment is accompanied by an official document called a Q67, which details the information of the vessel and the date of the shipment.

The Q67 document is the official release document that is sent from Perishable Products Export Control Board, advising of the intended shipment.
There are two methods of shipping the fruit overseas being, either by containers or by break bulk in specialised reefer ships. Containers are loaded directly at cold store facilities, which are then sent to container terminals to be loaded onto ships.

It is critical when containers are to be loaded that the dispatch planner coordinates with the transporter to make sure that the correct sequence of delivery of containers reaches the cold store on time. This ensures that fruit can removed from the cold store in an orderly sequence per container. Break bulk shipments are loaded from cold store onto trucks which are then sent to the fruit terminals to be loaded onto reefer ships. The dispatch planner will coordinate the sequence of the trucks to ensure that there is a constant supply to the ships. This is done to ensure that vessels work productively.

**Inspection**

When the fruit is ready to be loaded out, PPECB then inspect the fruit to ensure the fruit is of a good quality and that the fruit is at the required temperature. It is important that the fruit is at the correct temperature at load out, to ensure that the cold chain is maintained during transportation. Once all the fruit has been loaded out, a mate’s receipt is generated, which is sent to the exporter. When this has been done the fruit is then released from stock.

**Cold Store Systems**

It is important that qualified and experienced staff is employed at a cold store. This will ensure that the integrity of information is kept, which will in turn ensure that claims are kept to a minimum. Drivers of forklifts must be adequately trained, so as to ensure that the product is handled with care. Each cold store is required to undergo an annual audit process in order to comply with PPECB regulations. Increasingly cold stores are required to comply with food safety regulations.

There are very good information systems available on the market, which are fully automated, which allow ease of access of product through the cold stores, and ease of access for products through onto the vessels. This will increase the turn around time of product and increase the productivity of loading containers and vessels.
active learning

Watch the DVD clips, read through the learning material and do workplace research to gather the knowledge and information to complete the assignments below.

Activity 43.1 – Worksheet

List and shortly discuss in your own words the main objectives of cold store handling.

Activity 43.2 – Internet Research

See if you can find cold store handling software on the internet that can be used to ensure the correct and accurate handling of products and shortly explain how the system works.
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