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Validation:
Name: Position: Date:

Name: Position: Date:
Section 1

An Introduction to Company

Please provide overview of the factory, which may include the following aspects:
- Foundation
- Scope
- Mission
An Introduction to HACCP

Hazard Analysis Critical Control Point, or HACCP, is a system that gives us a proactive common sense approach to the safety management of our food products.

HACCP was originally designed in the early days of the American manned space programme, and was developed by the Pillsbury Company, NASA and the United States Army laboratories, to ensure the Microbiological safety of the astronauts’ food.

The HACCP system was launched publicly in 1971, and is designed to identify and control hazards that may occur anywhere in a food processing operation.

The benefits of the HACCP system are as follows;

- A Preventative System
- A Systematic Approach
- Helps demonstrate ‘Due Diligence’
- Internationally accepted
- Strengthens Quality Management Systems
- Facilitates regulatory inspection / external audits
- Demonstrates Management commitment
Key terms

**Critical Control Point (CCP):**
The points in the operation that must be controlled in order to produce a safe product.

**Target level:**
A specified value for a control measure, which has been shown to eliminate or minimise a hazard at the critical point.

**Tolerance:**
A specified variation from the Target Level, which is acceptable – values outside this tolerance indicates a deviation.

**Critical Limit:**
The safety limit, which must always be met at each critical point.

**Hazard:**
A factor which cause harm to the consumer.

**Risk:**
The likelihood of the hazard occurring.

**GHP**
Good Hygiene Practices or pre-requisite programs. Practices and procedures forming the basis of preventative actions.
- Receiving, Storage & Transport (e.g. Procedure for Receipt, Approved Supplier Program, etc)
- Calibration and Maintenance
- Cleaning and Sanitation
- Pest Control
- Staff Training & Personnel
- Product Identification and Traceability & Recall
- Premises (building and surrounds)
- Plant and personal hygiene

**Risk Analysis Table**
A tabulated record of all hazards that affect or have the potential to affect the safety of the product(s) under analysis. The significance of each hazard is rated as low, medium or high and control measures for each hazard are stated.

Validation:
Name: __________________________  Position: __________________________  Date: __________________________
Name: __________________________  Position: __________________________  Date: __________________________
HACCP Table
Hazards identified in the Risk Analysis Table as being of medium or high significance and their respective control measures are transferred to the HACCP Table. The critical limit for each of these hazards is specified. Details of who will monitor the critical limit to make sure it is not broken are given. Actions to be taken when critical limits are broken are also given. Records of monitoring activities are listed.

Sev
Severity. The consequence of the hazard occurring.
H = High = Life threatening or cause severe illness/injury.
M = Medium = Moderate illness/injury, not life threatening
L = Low = Mild illness/injury, not life threatening

Lik
Likelihood. The likelihood of the hazard occurring.
H = High = Likely to occur often
M = Medium = May occur sometimes
L = Low = Unlikely to occur

Sig
Significance. The consequence of the hazard occurring. When both severity and likelihood are high, the significance is high.
**HACCP TEAM**

The HACCP Team consists of the following personnel:

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Qualifications / Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HACCP Team Leader</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Technical Manager</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Production Manager</td>
<td></td>
</tr>
</tbody>
</table>

**Validation:**

Name: ___________________________  Position: ___________________________  Date: ___________________________

Name: ___________________________  Position: ___________________________  Date: ___________________________
**HACCP Scope**

The HACCP Team have identified the Scope of this study as being:

Processing oranges for approaching final production of squeezed unpasteurized orange juice.

From the intake of product to the arrival of the product at the customers facilities, taking into account all possible Microbiological, Chemical or Physical hazards which could occur during this process.

The HACCP Team will ensure that all working practices adhere to all current food safety legislation.
Terms of Reference

The HACCP team have determined to address the potential of Microbiological, Chemical and Physical contamination through the process of Intake, Handling, Processing, Storage and Distribution of product from intake to delivery of the product to the customers’ facilities.

The HACCP study takes into consideration that the company operates prerequisite programmes, which include:

- Good Manufacturing Practice
- Preventative Maintenance
- Personnel and Training
- Process Control
- Calibration
- Storage and Transportation
- Traceability and Product Recall
- Plant Hygiene and Personal Hygiene

During the formulation of the HACCP study, the team will review the various codes of practice and food regulations and will take the following food safety legislation and Codes of Practice into consideration throughout the study;

- European Communities (Hygiene of Foodstuffs) Regulations 2004
- Codex Alimentarius 2009
- Hazard Analysis and Critical Control Points (Codex 1997).
- Industrial guidance literature.
Product Identification, Intended Use and Process

Orange juice is a convenience food and can be drunk without further processing, or can be used by the consumer as an ingredient.

Orange juice is suitable for all consumer groups.

The HACCP team have determined flow analysis of the process:

*The following information determines a written process flow for process.*
HACCP Verification, Validation and Review Procedure

HACCP Team verified the HACCP process flow diagram by walking all the processes to ensure that the diagram was accurate.

*It has been determined by the HACCP team during this study that there is 1 CCP, wash step. The fruit needs to be washed and sanitized with either a premixed commercial solution or one that is mixed to 200 PPM available free chlorine or approved sanitizer at the manufacturer's recommended concentration. The critical limit is established at 200 PPM or equivalent by the appropriate manufacturer's recommendation. Monitoring should occur every two hours by the operator and then reviewed daily by the appropriate supervisor.*

An assessment of the HACCP Study will be conducted at the Management Review Meetings. Full reviews will be conducted once per annum on the complete HACCP system and also when new or amended products, processes, or equipment are to be introduced. This includes any work to be carried out by contractors. Validation of all control measures will be conducted by competent qualified staff and will be conducted during the Quality Assurance Auditing Programme as detailed in the Procedures Manual.

*In the event that any of the above verification procedures show that the HACCP plan requires review, a meeting of the HACCP team will take place in order to agree corrective actions.*

All HACCP team members and Department managers will ensure all staff within their area/department are trained in all control measures and C.C.P monitoring and adhere to the above guidelines.
Methodology

The flow chart has been designed, so that each step has been allocated a number. All steps that are repeated throughout the process have been allocated the same number, to save repetition in the Risk Analysis Table.

The method used to establish CCP’s within this HACCP Plan has been based on the significance of each hazard as determined by the Risk Analysis Table.

Hazards which can be controlled, prevented or eliminated by the application of Good Hygiene Practices (GHP) are not included in the HACCP Table. Therefore, these hazards have been identified in the Risk Analysis Table and have not been carried forward to the HACCP Table as CCP’s.

All other hazards not controlled by GHP and defined as highly significant within the Risk Analysis Table have been carried over to the HACCP Table as a CCP. These hazards are all monitored and a record of that activity maintained.

Hazards defined as less than significant within the Risk Analysis Table are not carried over to the HACCP Table and may not be monitored or a record maintained.

Total assessed risk = Likelihood x Severity

<table>
<thead>
<tr>
<th>Likelihood</th>
<th>Severity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 = Improbable event: Once every five years</td>
<td>1 = Negligible: no impact or not detectable</td>
</tr>
<tr>
<td>2 = Remote possibility: Once per year</td>
<td>2 = Marginal impact: only internal company target levels effected</td>
</tr>
<tr>
<td>3 = Occasional event: Once per month</td>
<td>3 = Significant: impact on critical limits</td>
</tr>
<tr>
<td>4 = Probable even: Once per week</td>
<td>4 = Major: impact on customers (not necessarily the public)</td>
</tr>
<tr>
<td>5 = Frequent event: Once per day</td>
<td>5 = Critical: public health risk, public product recall.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Likelihood</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>4</td>
<td>6</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>6</td>
<td>9</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>8</td>
<td>12</td>
<td>16</td>
<td>20</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>10</td>
<td>15</td>
<td>20</td>
<td>25</td>
</tr>
</tbody>
</table>
Decision Tree

The CCP decision tree is as follows:

Q1 - Do control measure(s) exist for the identified hazard?

   YES

Q2 - Is the step specifically designed to eliminate or reduce a hazard to an acceptable level?

   YES
   NO

Q3 - Could contamination occur at or increase to unacceptable level(s)

   NO
   YES

Q4 - Will a subsequent step eliminate or reduce the likely occurrence of the hazard to an acceptable level?

   NO
   YES

   NOT a CCP

   CCP

CCP Determination: A CCP is a step at which control can be applied and is essential to prevent or eliminate a food safety hazard or reduce it to an acceptable level. The information collated during the hazard analysis allows for the identification of CCP's. To assist in the decision making process of determining CCP’s a CCP decision tree was used.
Process flow

Fresh Squeezed Orange juice

Product arrives at the facility within a designated loading/intake area, intake arrival checks are completed by the warehouse operative to ensure correct quantities are received and each product line is labelled with its own traceability number. Oranges are received either in boxes or in bins and held at ambient temperatures until ready for processing. The oranges are hand graded/inspected before sanitizing with a chemical sanitizer followed by a clear water rinse. Following sanitizing/washing, they are squeezed to extract the juice that is then collected in ready-to-serve containers and maintained under refrigeration at 5°C until purchased. Waste are segregated and removed into a designated area.

The Warehouse Operative conducts a final despatch check to ensure temperature and label compliance. When authorised by the Warehouse Inspector, by way of a positive release labelling system, the product is loaded onto a temperature-controlled vehicle and is delivered direct into the customers.
Section 2

Process flow diagram

Step 1
Product arrives in temperature controlled goods in area

Step 2
Arrival checks completed in goods in area. Traceability attached.

Step 3
Transfer to appropriate store. Awaiting processing

Step 4
Grading

Step 4A
Damaged products removed

Step 5
Fruit Wash (Sanitizing/Rinsing) CCP

Step 6
Extraction

Step 7
Filling

Step 8
Chilling/Holding

Step 9
Products transferred to pallet, secured for dispatch

Step 10
Product transferred to relevant temperature controlled goods out area

Step 10A
Waste transferred to designated area

Step 11
Final dispatch checks

Step 12
Finished product loaded on to temperature controlled vehicle and despatched

Validation:
Name: Position: Date:

Name: Position: Date:
### Section 3

**Hazard analysis chart**

<table>
<thead>
<tr>
<th>Process Step</th>
<th>Hazard &amp; Source/Cause</th>
<th>Likely Occurrence (High / Medium / Low)</th>
<th>Adverse Health Effects (H/M/L)</th>
<th>Control Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Product arrives in temperature controlled goods in area.</td>
<td><strong>Physical Hazards</strong>&lt;br&gt;- External contamination from rain water, bird droppings, vermin/rodents and flying insects during in loading process.&lt;br&gt;- Glass contamination from internal light sources.&lt;br&gt;- Pests/rodents and or Flying insects due to poor hygiene/debris build up&lt;br&gt;- Physical risks from straps/thermocouples/ staples/foreign bodies found on pallets on intake.&lt;br&gt;&lt;br&gt;<strong>Chemical Hazards</strong>&lt;br&gt;Chemical contamination from Chemical/ Pesticide at source of origin.&lt;br&gt;&lt;br&gt;<strong>Microbiological Hazards</strong>&lt;br&gt;Microbiological contamination during process at the source of origin.</td>
<td>Low</td>
<td>Medium</td>
<td>- Curtains/cushions fitted to all loading bays to prevent external contamination.&lt;br&gt;- Prerequisite programmes in place to control all named hazards, include:&lt;br&gt;  - Daily hygiene schedules and cleaning programmes, glass policy and daily audits.&lt;br&gt;  - External and internal Pest control programmes. EFKs in place in intake areas.&lt;br&gt;  - All light fittings covered.&lt;br&gt;  - Supplier Q.A.S systems and HACCP in place and verified/audited by the Technical Department to eliminate/reduce potential foreign body or Microbiological contamination.&lt;br&gt;- Intake inspections to identify foreign body contamination on arrival&lt;br&gt;  - Chemical/pesticide used at source in conjunction with E.E.C/Local regulations&lt;br&gt;  - Supplier Q.A.S in place and regularly audited: validation by way of Chemical MRL testing programme, records retained&lt;br&gt;  - Supplier Q.A.S systems and HACCP in place and verified/audited by the Technical Department to eliminate/reduce potential foreign body or Microbiological contamination.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Arrival checks</td>
<td><strong>Physical Hazards</strong></td>
<td></td>
<td></td>
<td>- Warehouse operatives trained in Food safety/hygiene</td>
</tr>
</tbody>
</table>

**Validation:**
- Name:  
- Position:  
- Date:  

- Name:  
- Position:  
- Date:
### HACCP Plan Orange Juice

**Completed & traceability attached**

- Physical contamination from Quality Inspectors
- Foreign Bodies found within product and/or packaging from source of origin or during transportation.

<table>
<thead>
<tr>
<th>Hazard Type</th>
<th>Level 1</th>
<th>Level 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Hazards</td>
<td>Low</td>
<td>Medium</td>
</tr>
</tbody>
</table>

- Any foreign body contamination identified escalated to Management, positive release system in place and adhered to by all teams.

3. **Transfer to cold store awaiting processing.**

**Physical Hazards**

- Physical contamination from Warehouse operatives.
- Glass contamination from internal light sources.
- Pests/rodents and or Flying insects due to poor hygiene/debris build up

<table>
<thead>
<tr>
<th>Hazard Type</th>
<th>Level 1</th>
<th>Level 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Hazards</td>
<td>Low</td>
<td>Medium</td>
</tr>
</tbody>
</table>

- Prerequisites in place to control named hazards include:
  - Daily hygiene schedules and cleaning programmes, Glass policy and weekly glass audits, Pest control programmes and EFKs in intake areas maintained by external contractor,
  - Staff awareness/training programmes in place with records of training retained/filed.

4. **Grading**

**Physical Hazards**

- Physical contamination from operator
- Foreign body/Dust contamination from production environment.

<table>
<thead>
<tr>
<th>Hazard Type</th>
<th>Level 1</th>
<th>Level 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Hazards</td>
<td>Low</td>
<td>Low</td>
</tr>
</tbody>
</table>

- Staff hygiene policy/programmes in place with all site staff trained and records of training maintained and retained on personnel files.

4A. **Waste removed**

**Physical Hazards**

- Physical contamination from operator
- Foreign body/Dust contamination from warehouse environment.

<table>
<thead>
<tr>
<th>Hazard Type</th>
<th>Level 1</th>
<th>Level 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Hazards</td>
<td>Low</td>
<td>Low</td>
</tr>
</tbody>
</table>

- Staff hygiene policy/programmes in place with all site staff trained and records of training maintained and retained on personnel files.

5. **Fruit Wash (Sanitizing/Rinsing)**

**Chemical Hazards**

- Chemical contamination from Chemical/Pesticide at source of origin.

<table>
<thead>
<tr>
<th>Hazard Type</th>
<th>Level 1</th>
<th>Level 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical Hazards</td>
<td>Medium</td>
<td>High</td>
</tr>
</tbody>
</table>

- Wash 200 PPM chlorine or Manufacturer’s equivalent of like product
- The critical limit is established at 200 PPM or equivalent by the appropriate manufacturer’s recommendation.
- Monitoring: at start and every two hours by the operator and then reviewed daily by the appropriate supervisor.
- Corrective action: Re: Sanitize Oranges & adjust fruit Wash, minimum strength required 200 PPM or >.
- Staff trained of CCP procedure
- CCP records and training records maintained

**Microbiological Hazards**

- Microbiological contamination during process at the source of origin

<table>
<thead>
<tr>
<th>Hazard Type</th>
<th>Level 1</th>
<th>Level 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microbiological Hazards</td>
<td>Medium</td>
<td>High</td>
</tr>
</tbody>
</table>

6. **Extraction**

**Physical Hazards**

- Physical contamination from operator
- Foreign body/Dust contamination from production environment.

<table>
<thead>
<tr>
<th>Hazard Type</th>
<th>Level 1</th>
<th>Level 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Hazards</td>
<td>Low</td>
<td>Low</td>
</tr>
</tbody>
</table>

- Staff hygiene policy/programmes in place with all site staff trained and records of training maintained and retained on personnel files.
- Controlled by sanitizing

**Validation:**

- **Name:**
- **Position:**
- **Date:**
### 7. Filling

<table>
<thead>
<tr>
<th>Physical Hazards</th>
<th>Issue</th>
<th>Review</th>
<th>Next Review</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical contamination from operator</td>
<td>Low</td>
<td>Low</td>
<td></td>
</tr>
<tr>
<td>Foreign body/Dust contamination from production environment.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Validation:**
  - **Name:** [Name]
  - **Position:** [Position]
  - **Date:** [Date]

### 8. Chilling and Holding

<table>
<thead>
<tr>
<th>Physical Hazards</th>
<th>Issue</th>
<th>Review</th>
<th>Next Review</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical contamination from Warehouse operatives.</td>
<td>Low</td>
<td>Low</td>
<td></td>
</tr>
<tr>
<td>Microbiological growth due to breakdown of refrigeration unit</td>
<td>Low</td>
<td>High</td>
<td></td>
</tr>
</tbody>
</table>

- **Validation:**
  - **Name:** [Name]
  - **Position:** [Position]
  - **Date:** [Date]

- Equipment inspected on daily intervals and during manufacture
- All staff trained in correct substance control/usage.
- Procedures for maintenance, refrigeration breakdown, and daily temperature checks, computerised and alarmed monitoring of refrigeration units.
- Since the high acidity of the juice can retard the growth of bacteria, the pH will be monitored to insure it remains at a low level. Corrective actions are initiated to adjust the pH of the product when there is a deviation.

### 9. Products transferred on to pallet.

<table>
<thead>
<tr>
<th>Physical Hazards</th>
<th>Issue</th>
<th>Review</th>
<th>Next Review</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical contamination from warehouse operatives.</td>
<td>Low</td>
<td>Low</td>
<td></td>
</tr>
<tr>
<td>Glass contamination from internal light sources.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pests/rodents and or Flying insects due to poor hygiene/debris build up</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Validation:**
  - **Name:** [Name]
  - **Position:** [Position]
  - **Date:** [Date]

- At this stage of the process the product is bagged and sealed and the risk of contamination is highly unlikely.

### 10. Product transferred to temperature controlled goods out area.

<table>
<thead>
<tr>
<th>Physical Hazards</th>
<th>Issue</th>
<th>Review</th>
<th>Next Review</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical contamination from Warehouse operatives.</td>
<td>Low</td>
<td>Low</td>
<td></td>
</tr>
<tr>
<td>Glass contamination from internal light sources.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pests/rodents and or Flying insects due to poor hygiene/debris build up</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Microbiological Hazards

<table>
<thead>
<tr>
<th>Microbiological Hazards</th>
<th>Issue</th>
<th>Review</th>
<th>Next Review</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microbiological growth due to breakdown</td>
<td>Low</td>
<td>Low</td>
<td></td>
</tr>
</tbody>
</table>

- **Validation:**
  - **Name:** [Name]
  - **Position:** [Position]
  - **Date:** [Date]

- Prerequisites in place to control named hazards include;
  - Procedures for maintenance, refrigeration breakdown, and daily temperature checks, computerised and alarmed monitoring of
### 10A. Waste transferred to designated area

<table>
<thead>
<tr>
<th>Physical Hazards</th>
<th>Level</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Physical contamination from Warehouse operatives.</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>- Glass contamination from internal light sources.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Pests/rodents and or Flying insects due to poor hygiene/debris build up</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Personnel hygiene policies and procedures in place with all staff aware/trained with records of training

### 11. Finish dispatch checks

<table>
<thead>
<tr>
<th>Physical Hazards</th>
<th>Level</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Physical contamination from operative</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>- Glass contamination from internal light sources.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Pests/rodents and or Flying insects due to poor hygiene/debris build up</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- All bay doors fitted with curtains/cushions to prevent external contamination.

### 12. Products loaded on to temperature controlled vehicle and despatched.

<table>
<thead>
<tr>
<th>Physical Hazards</th>
<th>Level</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>- External contamination from bird droppings and / or rain water.</td>
<td>Low</td>
<td>Low</td>
</tr>
</tbody>
</table>

- Hygiene programmes in place, trailers cleaned and sanitised at regular intervals by external contractor, records retained

<table>
<thead>
<tr>
<th>Physical / Chemical / Microbiological Hazard</th>
<th>Level</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Cross Contamination or Taint of finished product due to poor trailer hygiene.</td>
<td>Low</td>
<td>Low</td>
</tr>
</tbody>
</table>

- Hygiene programmes in place, trailers cleaned and sanitised at regular intervals by external contractor, records retained

<table>
<thead>
<tr>
<th>Microbiological Hazards</th>
<th>Level</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Microbiological growth due to breakdown of refrigeration unit on truck</td>
<td>Low</td>
<td>Low</td>
</tr>
</tbody>
</table>

- Hygiene programmes in place, trailers cleaned and sanitised at regular intervals by external contractor, records retained
- Trailer hygiene monitored during despatch procedures

- Prerequisites in place to control named hazards include:

- Procedures for maintenance, refrigeration breakdown procedure
### Section 4

#### CCP decision tree

<table>
<thead>
<tr>
<th>Process Step</th>
<th>Hazard</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q5</th>
<th>CCP</th>
<th>Team comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Product arrives in temperature controlled goods in area. Rain water</td>
<td></td>
<td>Y</td>
<td>Y</td>
<td>-</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>No</td>
</tr>
<tr>
<td>1. Product arrives in temperature controlled goods in area. Bird droppings</td>
<td></td>
<td>Y</td>
<td>Y</td>
<td>-</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>No</td>
</tr>
<tr>
<td>1. Product arrives in temperature controlled goods in area. Glass contamination</td>
<td></td>
<td>Y</td>
<td>Y</td>
<td>-</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>No</td>
</tr>
<tr>
<td>1. Product arrives in temperature controlled goods in area. Rodents/Flying insects</td>
<td></td>
<td>Y</td>
<td>Y</td>
<td>-</td>
<td>N</td>
<td>N</td>
<td>-</td>
<td>No</td>
</tr>
<tr>
<td>1. Product arrives in temperature controlled goods in area. Foreign bodies on pallets</td>
<td></td>
<td>Y</td>
<td>Y</td>
<td>-</td>
<td>N</td>
<td>N</td>
<td>-</td>
<td>No</td>
</tr>
<tr>
<td>1. Product arrives in temperature controlled goods in area. Chemical/Pesticide residue</td>
<td></td>
<td>Y</td>
<td>Y</td>
<td>-</td>
<td>N</td>
<td>N</td>
<td>-</td>
<td>No</td>
</tr>
<tr>
<td>1. Product arrives in temperature controlled goods in area. Microbiological contamination</td>
<td></td>
<td>Y</td>
<td>Y</td>
<td>-</td>
<td>N</td>
<td>N</td>
<td>-</td>
<td>No</td>
</tr>
<tr>
<td>2. Arrival checks completed &amp; traceability attached Physical contamination by Operatives</td>
<td></td>
<td>Y</td>
<td>Y</td>
<td>-</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>No</td>
</tr>
<tr>
<td>2. Arrival checks completed &amp; traceability attached Glass contamination</td>
<td></td>
<td>Y</td>
<td>Y</td>
<td>-</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>No</td>
</tr>
</tbody>
</table>

Validation:
Name: Position: Date:
Name: Position: Date:
### 2. Arrival checks completed & traceability attached

| Rodents/Flying Insects | Y | Y | N | N | - | No |

Pest control programme in place and maintained to include bait stations and EFK's

---

### 3. Transfer to cold store awaiting processing.

| Physical contamination by Operatives | Y | Y | - | N | Y | Y | No |

Personal hygiene policy in place and monitored

---

| Glass contamination | Y | Y | - | N | Y | Y | No |

Glass policy/audits in place and maintained

---

| Rodents/Flying Insects | Y | Y | - | N | N | - | No |

Pest control programme in place and maintained to include bait stations and EFK's

---

### 4. Grading

| Physical contamination by Operatives | Y | Y | - | N | Y | Y | No |

Personal hygiene policy in place and monitored

---

| Glass contamination | Y | Y | - | N | Y | Y | No |

Glass policy/audits in place and maintained

---

### 4A. Waste removed

| Physical contamination | Y | Y | - | N | Y | Y | No |

Personal hygiene policy in place and monitored

---

### 5. Fruit Wash (Sanitizing/Rinsing) **CCP**


---

### 6. Extraction

| Physical contamination by Operatives | Y | Y | - | N | Y | Y | No |

Personal hygiene policy in place and monitored

---

| Glass contamination | Y | Y | - | N | Y | Y | No |

Glass policy/audits in place and maintained

---

### 7. Filling

| Physical contamination by Operatives | Y | Y | - | N | Y | Y | No |

Personal hygiene policy in place and monitored

---

| Glass contamination | Y | Y | - | N | Y | Y | No |

Glass policy/audits in place and maintained

---

Validation:
Name:  
Position:  
Date:

Name:  
Position:  
Date:
### HACCP Plan Orange Juice

<table>
<thead>
<tr>
<th>Step</th>
<th>Issue</th>
<th>Review</th>
<th>Next Review</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### 8. Chilling and Holding
- **Microbiological growth due to breakdown of refrigeration unit**
  - Y Y - N Y Y No
  - *pH monitored to insure it remains at a low level. Corrective actions in place to adjust the pH of the product when there is a deviation*

#### 9. Products transferred on to pallet.
- **Physical contamination by Operatives**
  - Y Y - N Y Y No
  - Personal hygiene policy in place and monitored
- **Glass contamination**
  - Y Y - N Y Y No
  - Glass policy/audits in place and maintained
- **Rodents/Flying Insects**
  - Y Y - N N - No
  - Pest control programme in place and maintained to include bait stations and EFK's

#### 10. Products transferred to temperature controlled goods out area.
- **Physical contamination by Operatives**
  - Y Y - N Y Y No
  - Personal hygiene policy in place and monitored
- **Glass contamination**
  - Y Y - N Y Y No
  - Glass policy/audits in place and maintained
- **Rodents/Flying Insects**
  - Y Y - N N - No
  - Pest control programme in place and maintained to include bait stations and EFK's

#### 10A. Waste transferred to designated area
- **Physical contamination by Operatives**
  - Y Y - N Y Y No
  - Personal hygiene policy in place and monitored

#### 11. Finish dispatch checks
- **Physical contamination by Operatives**
  - Y Y - N Y Y No
  - Personal hygiene policy in place and monitored
- **Glass contamination**
  - Y Y - N Y Y No
  - Glass policy/audits in place and maintained
- **Rodents/Flying Insects**
  - Y Y - N N - No
  - Pest control programme in place and maintained to include bait stations and EFK's

#### 12. Product loaded on to temperature controlled vehicle and dispatched.
- Vehicle hygiene checks in place

---

**Validation:**

<table>
<thead>
<tr>
<th>Name:</th>
<th>Position:</th>
<th>Date:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Name:</th>
<th>Position:</th>
<th>Date:</th>
</tr>
</thead>
</table>

---
<table>
<thead>
<tr>
<th>Cross contamination/taint</th>
<th>Y</th>
<th>Y</th>
<th>-</th>
<th>N</th>
<th>N</th>
<th>-</th>
<th>No</th>
<th>Records of cleaning retained and inspected monthly.</th>
</tr>
</thead>
<tbody>
<tr>
<td>12. Product loaded on to temperature controlled vehicle and dispatched. Rain water</td>
<td>Y</td>
<td>Y</td>
<td>-</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>No</td>
<td>All Out loading doors fitted with Curtains/Cushion Buffers</td>
</tr>
<tr>
<td>12. Product loaded on to temperature controlled vehicle and dispatched. Bird droppings</td>
<td>Y</td>
<td>Y</td>
<td>-</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>No</td>
<td>All Out loading doors fitted with Curtains/Cushion Buffers</td>
</tr>
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</table>
Section 5
Risk assessment

Risk Assessment for Foreign body contamination, Plastic, Glass and Wood

<table>
<thead>
<tr>
<th>Location</th>
<th>Assessment Date</th>
<th>Last assessment Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazards identified</td>
<td>Risk assessment to consider foreign body contamination including Plastic, Wood and Glass on site</td>
<td>Calculate Hazard Rating – Frequency ((Sv + Prb))</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rating</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Frequency</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

Control Measures

1. Glass register and weekly glass audit
2. Weekly Hygiene audit checks general house keeping for and foreign bodies. If there is a repeat issue it will be marked Red. This audit is bonus related and is discussed at the weekly management meeting
3. Broken pallets are removed to outside the compactor area and dumped into a skip.
4. All damaged crates are removed to the waste area and returned.
5. Glass breakage procedure are followed and completed if there is a breakage.
6. All staff receive Hygiene and Food safety training
7. Jewellery policy enforced and monitored via the Hygiene audit

Low risk.

Validation:
Name: Position: Date:
Name: Position: Date:
## Section 6

### Validation table

<table>
<thead>
<tr>
<th>Potential Hazard</th>
<th>Critical Limits</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hepatitis A, Salmonella, E. Coli, E. coli 0157:H7</td>
<td>Elimination of poor hygiene practices by food handlers etc</td>
<td>Code of Hygienic Practices for Fresh Fruit &amp; Vegetables (Codex Alimentarius)</td>
</tr>
<tr>
<td>Listeria monocytogenes</td>
<td>Poor hygiene practices</td>
<td>CACP/RCP53-2003</td>
</tr>
<tr>
<td>Campylobacter jejuni</td>
<td>Poor cleaning practices</td>
<td>Code of Practice No1 – Risk Categorisation of Food Businesses</td>
</tr>
<tr>
<td>Shigella</td>
<td></td>
<td>Code of Practice No 4 – Food Safety in the Fresh Produce</td>
</tr>
<tr>
<td>Other food poisoning organisms</td>
<td></td>
<td>Code of Practice No 10 – Assessment of HACCP compliance</td>
</tr>
<tr>
<td>Norwalk Viruses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parasites i.e. Cyclosporidium</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salmonella</td>
<td>Sampling plan on microbiological criteria for foodstuffs</td>
<td>Commission Regulation (EC) No: 2073/2005 15&lt;sup&gt;th&lt;/sup&gt; November 2005</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pesticides</td>
<td>Control of MRL (pesticide) levels in food</td>
<td>Commission Regulation (EC) No: 396/2005 23&lt;sup&gt;rd&lt;/sup&gt; February 2005</td>
</tr>
</tbody>
</table>

**Validation:**

**Name:**

**Position:**

**Date:**