Food Safety requirements in the EC

Dr Agr Kristina Mattsson
Anapa, Russian Federation, 4-7 October 2010
Areas in food safety

- **Biological hazards**
  - Microorganisms

- **Chemical hazards**
  - Pesticide residues
  - Contaminants
  - Natural toxic substances (mycotoxins)

- **Physical hazards**
  - Foreign bodies

- **Traceability**
General obligation

Food business operators are responsible. They shall ensure that food safety and food hygiene is guaranteed through all stages of production.
Legal basis

- Regulation (EC) No 178/2002 laying down the principles and requirements of food law
- Regulation (EC) No 852/2004 on hygiene on foodstuffs
- Directive 91/414/EEC concerning the placing of plant protection products on the market
- Regulation (EC) No 396/2005 on maximum residue levels of pesticides in or on food
- Commission regulation (EC) No 1881/2006 setting maximum levels for certain contaminants in foodstuffs
- Council directive 89/107/EEC concerning food additives
- Directive 2000/13/EC on the labelling of foodstuffs
Food business quality assurance - based on HACCP

- Describe the business operations
- Identify hazards in the operation
- Establish practices to eliminate the risk for identified hazards
- Establish acceptable tolerance limits
- Establish control points
- Establish correction procedures
- Establish procedures for keeping records on all controls made in the business operation
Describe the business operations (f.ex. apple harvest and packing)

- Picking
- Transfer to bulk bin
- Transport to packhouse
- Unloading
- etc.
Identify hazards

Picking
- Rain/wet fruit
- Fingernails
- Rough/unclean handling
- Correct maturity?

Transfer to bulk bin
- Bruising
- Soiling

Transport to packhouse
- Bruising
- High temperatures

Unloading
- Bruising
- High temperatures

Correct maturity?
Establish practices to eliminate the risk for identified hazards

- **Picking**
  - Rain/wet fruit
  - Fingernails
  - Rough/unclean handling
  - Correct maturity?

- **Transfer to bulk bin**
  - Bruising
  - Soiling

- **Transport to packhouse**
  - Bruising
  - High temperatures

- **Unloading**
  - Bruising
  - High temperatures

**Instructions:**
- Only clean bins, padding material in bins, train staff
- Soft driving, keep bins in shade, establish max time before transportation to packhouse
- Unload bins in cold water, eliminate waiting before unloading

**Precautions:**
- Pick in dry weather, use cotton gloves, no long fingernails, establish correct harvest maturity, good sanitation
Establish control points

Picking
- Rain/wet fruit
- Fingernails
- Rough/unclean handling
- Correct maturity?

Transfer to bulk bin
- Bruising
- Soiling

Transport to packhouse
- Bruising
- High temperatures

Unloading
- Bruising
- High temperatures

Pick in dry weather, use cotton gloves, no long fingernails, establish correct harvest maturity, good sanitation

Only clean bins, padding material in bins, train staff

Soft driving, keep bins in shade, establish max time before transportation to packhouse

Unload bins in cold water, eliminate waiting before unloading
Keep records on all controls made in the business operations
And so on.....
Food hygiene (852/2004 annex 1.)

- Give staff proper training
- Keep facilities clean
- Disinfect after cleaning, where necessary, facilities and equipment
- Use clean potable water
- Ensure that staff is healthy
- Prevent animals and pests from contaminating products
- Handle hazardous substances carefully to prevent contamination
- Keep records on all controls made
Where should this be applied?

- Primary production
- Sorting and Packaging
- Storage
- Transport
- Storage (at importer)
- Distribution
- Wholesale
- Retail

Export side

Import side
Pest residues

- Business operators exporting products **MUST KNOW EXACTLY** which plant protection chemicals are allowed to be used on products and minimum time from treatment to harvest in the destination country!

- In all EC countries - same rules on substances and residue limits
Irregularities in residue limits

- Traders usually have a contract clause obliging the **seller to pay for all expenses** related to the discovery of high levels of pesticides residues or f.ex. mycotoxins.
- Irregularities usually mean **no further deliveries** to this buyer.
- Irregularities are **recorded** in the list available in the **entire Community**.
- Irregularities may **damage all exporters** in a country.
EU Pesticide database

http://ec.europa.eu/sanco_pesticides/public/index.cfm

Provides information on pesticides and limits.
Important principle

Before export commences the operator must have established:

- Staff training
- Work procedures
- Controls
- Record keeping
- Traceability

Giving 100% reliability.
Rasff

EU Rapid alert system for Food and Feed

Irregularities found in one EU-country are reported to Brussels and further to all Member States
Traceability

The whole market can stop functioning if it is not possible to trace food and feed. There must be a system so that targeted accurate withdrawals, or information to consumers and officials can be made at all stages if there is a food safety problem.

*Recital 28 in EC No 178/2002.*
Traceability

It is necessary to ensure that a food or business, including an importer, can identify at least the business from which the food, feed, animal or substance has been supplied.

Recital 28 in EC No 179/2002.
Traceability means the ability to trace and follow a food, feed, food producing animal or substance through all stages of production, processing and distribution.

*Article 3 point 15 in EC No 179/2002.*
## Legal and trade requirements on traceability

<table>
<thead>
<tr>
<th></th>
<th>Legal requirement</th>
<th>Additional Trade requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify the supplier</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Mark with batch/lot number</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Record on suppliers of batches/lots</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Full traceability down to individual field</td>
<td>No</td>
<td>Yes, usually</td>
</tr>
<tr>
<td>Record of pesticide treatments on individual fields</td>
<td>No</td>
<td>Yes, usually</td>
</tr>
</tbody>
</table>
Conclusion

Working together for high quality and full food safety is the key to success.

*It may sound very basic but errors are common also among EC producers and packers.*
Thank you for listening