

# Food Safety – Case studies and Best Practices

DAAF Food Safety Conference

May 10, 2024



# Operating a Food Business



## Specific Skills are required:

- Managerial & Leadership
- Strategic Thinking – adapt to changes quickly
- Marketing – know your product and appeal to the consumer
- Technical Knowledge – production skills, maintenance, cleaning
- Financial Management – plan for expansion, automation (manage cash flow)
- Sales – putting product into consumers hands
- Food Safety – meet the demands of regulatory and buyers

# Food Safety – a key requirement



## Canadian Regulators – keeping in step with trading partners (2019)

- CFIA regulates and assures processors meet the Safe Food for Canadians Regulation
- To move products out of province →
- To move products into export Markets →
- To export or import food products →

**CFIA  
License -  
Mandatory**

## The retail buyer has a checklist:

- To get into retail (with some exceptions - buy local program) – CFIA license Only
- For the majority CFIA License + 3<sup>rd</sup> Party HACCP Certification
- Why? HACCP Certification – the rigor of the audit assures compliance to HACCP
  - Risk Management - reduces risk of food safety issues



# Major Hurdles and Best Practices

## The Hurdles (or pitfalls):

- What follows is a review of the hurdles that are commonly seen
- Examples are not exhaustive – plenty of scenarios are possible

## Best Practices

- Innovation in best practices assures success
- Those pitfalls can be costly and so is born the innovation in best practices
- Both the pitfalls and best practices – touch on the required skill areas of running a business (finance, technical, food safety and others)
  - Food Safety issues can shut you down and can be costly to fix
- The expertise to avoid those pitfalls is out there – but you need to listen to that expertise

# Facility – build or renovate



## Facility Design:

- Is it a suitable processing environment – people and product flow
  - People move products from raw to finished product – is there cross contamination concerns
  - If the cleaning of facility and equipment requires lots of water – will the wash water be removed
  - Is there storage: raw and finished products (ambient, refrigerated/frozen storage)
  - Cleaning – can facility surfaces and equipment withstand repeated cleaning
- Is there room to grow production volume → storage

## Best Practice - Building New or Renovating

- Consult with a food safety expert or a building design engineer\*
  - New facility – highest point in the room was the floor drain – pushing water
  - Existing facility – wall ceiling surfaces – painted drywall
- Keep in mind facility surfaces, product and people flow - avoid cross contamination

# Equipment

## Equipment Design:

- Used or New
- Is there room to install, operate, clean and maintain?
- Technical Staff - operate, clean and maintain?
- Equipment Operating Conditions
  - Can equipment production volumes grow with an increase in demand?
- **Best Practice – Equipment Choices**
- Consult with a food safety expert / technologist on equipment & options for processing
- Consult with equipment makers – they can shed light on pros and cons
  - Cinder block smokehouse – vs convection unit
  - Jacketed kettle – 80 gallon vs 150 gallon – restricted production immensely



# Technical Staff

## Food Safety, Production, Maintenance, Logistics:

- Hire fully trained or invest in training for your staff?
  - Training is ongoing!
- **Food Safety** – knowledge in HACCP, chemistry, microbiology, engineering, GFSI, Regulatory Awareness
  - Ideally someone with a diploma or degree
- **Production** – training in operating expensive complicated equipment, cleaning
- **Maintenance** – knowledge in Preventive Maintenance, troubleshooting problems (equipment specific – equipment makers provide support)
- **Logistics** – knowledge of traceability and meeting customer demands for delivery of product (i.e. palletizing, scheduling etc.)



# Technical Staff

## Best Practices – Technical Training

- Training courses in: HACCP, internal auditing, shelf life, cleaning, pest control, recall, traceability, labeling and so on
  - Food and Beverage Atlantic – training courses cheaper for members
  - Maintain awareness of regulatory changes – Health Canada (Amendments to the Food and Drug Regulations)
  - Recalls Notification
- Food Safety Experts – provide specialized training
- Food Safety Culture is important – shipper/receiver → the CEO
  - Major UK Retailer – CEO denied access to food factory
  - Installed Equipment – owner turned down training on operation, cleaning and troubleshooting – took 2 weeks to dial in equipment

# HACCP Certification

## Retailers want processors 3<sup>rd</sup> Party HACCP certified:

- Always ask the retailer what they want re: HACCP
- Remember dual requirement - CFIA license + HACCP certification
- Pick a standard that suits your operation – training course available that explains GFSI and the different standards (SQF, BRCGS, FSSC 22000, CanadaGAP, IFS)
- Get the standard, develop and implement and maintain requirements
- 1<sup>st</sup> HACCP Cert Audit – pass → schedule annual follow up audits. Cost?

## Best Practices – 3<sup>rd</sup> Party HACCP Certification

- Client invested the salary for a qualified HACCP Manager → non conformities decreased, audit score increased, product quality increased, food waste decreased
- GFSI does regular updating of FS standards → continuous improvement



# Production Capacity

## Capacity is a major hurdle

- What is your current production capacity (units/hour or units/day)?
- Can you increase capacity with current equipment?
  - How much can you produce and store until it can be shipped?
- If your product is in high demand → You have expanded your production – leaving no space to move
  - Bottleneck is raw and finished product storage, an oven or maybe a packaging machine
  - Increase opportunity for errors in production and possible food safety and quality issues
- Expansion may require a new location or a new build



# Production Capacity

## Best Practices – Production Capacity

- Process Engineers, food technologist, food safety expert - with experience in the food industry
- Equipment manufacturers – who are immersed in the industry can be of great help
  - They can probably suggest overall size of facility to mate up with the size of equipment needed

### 2 scenarios

- Your product is so popular - Retailer calls and says you are going national!
  1. Client backed out of offer, stopped recertification – they did not want to undergo a huge expansion. 1 truckload → 3 or maybe 4 truckloads / month
  2. Client analyzed the cost of expansion to a fully automated facility
    - Not interested in the huge investment in a new facility
    - Decided sticking to foodservice was the place to be



# Resources

## From training to food safety experts

- Training is available from local providers
  - Food and Beverage Atlantic provides: marketing, pitching your product, digital marketing
  - Food Safety training - ensure the provider is International HACCP Alliance Accredited
- Funding
  - Provincial government (DAAF), ACOA and other federal funding programs (Canadian Agricultural Partnership)
  - Provide assistance in expanding your capacity, getting expert help (food safety, marketing, engineering)
- Consulting (food safety)
  - Program development, licensing to CFIA, GFSI standards
  - Gap assessments compare your facility to a desired standard, report provides guidance on how to achieve compliance
  - Labeling and regulatory compliance & Shelf life studies

# Resources

## Suppliers of Other Services

- Equipment manufacturers will provide assistance to you to realize your goals – they get a sale out of the helping
  - Ask if they are 3A Sanitary Standard Certified
  - Off shore equipment – write a detailed sales contract
- Ingredient suppliers can help with R&D of new products
- Cleaning chemical suppliers can provide you with approved chemicals and may even provide training on safe use of their products
- Packaging suppliers will provide best solutions for packaging your product
  - To maximize tamper evidence, enhance shelf life, withstand abuse during distribution, enable better display at retail

# Resources

## Suppliers of Other Services

- Accredited labs – Do testing for microbial, chemical and physical hazard analysis, shelf life studies, allergen testing
  - Ask for proof of accreditation for the tests you want done
- Do it yourself Testing suppliers – Provide affordable on site real time analyses for your on site lab – allergens, microbial and chemical analysis testing
  - Keep in mind requirements for on site labs in regulatory and 3<sup>rd</sup> party HACCP standards
- On site lab testing equipment – Ask for equipment that can provide accurate consistent test results, can be calibrated by yourself with a requirement to ensure equipment can be sent away for calibration yearly
  - ask for equipment specifications and validation data
- Food Labels and Nutrition Facts Table
  - Service providers can ensure compliance to labeling requirements
  - Nutrition Facts Tables can be easily developed using data base information as opposed to expensive analytical testing
  - ask for testimonials



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**What I do.....**



## Food Safety & Regulatory Affairs

- Written program development for compliance to CFIA or 3<sup>rd</sup> party HACCP standards
  - 3<sup>rd</sup> Party HACCP standards include: BRCGS, SQF, FSSC 22000, IFS
- Gap assessments of your current facility and written food safety programs with a review of facility design, staff activities to your desired standard.
  - Internal audits of your food safety system for regulatory compliance and / or 3<sup>rd</sup> party requirements
- Training – customized on site training
- Construction / Renovations reviews
  - Work closely with a building envelope consultant (BSc Civil Engineering)
- Label compliance, product formulations for regulatory compliance



# QUESTIONS