

STRATEGIES FOR FOREIGN OBJECT CONTROL

Or:

Denial to Control

American Food Sure 2019

MY BACKGROUND

- Currently working with co-packers to ensure food safety
- Prior - ~20 years with poultry processors - slaughter and Ready-to-Eat
- Foreign object control has been a major focus most of that time

WHY THIS TOPIC?

- In spite of best efforts, there have been successes and failures
- Surprisingly, the occurrence of recalls related to FM doesn't seem to be related to the sophistication and experience of the senior management team, use of technology or advanced problem solving techniques
- Some of the most educated/experienced/wealthy operations seem to struggle the most

MY “AHA” MOMENT

- 20+ years ago
- Metal in Pack-out
- Where did it come from?



FAST FORWARD

Three Class 1 recalls from major meat producers for foreign material within the past 3 weeks.

CASE STUDY

- Processor of frozen items
- Contaminant: plastic
- Metal detection ineffective
- X-ray ineffective (frozen)
- Result: contaminants were virtually undetectable in finished product



HOW DO WE TACKLE THIS PROBLEM?

Step 1 – Ask the obvious question – where in the process did these foreign objects come from?



DENIAL

- It came from consumers
- It came from raw meat suppliers
- It came from ingredient suppliers
- It came from packaging suppliers



DATA COMPONENT

It couldn't have happened here

Our external complaint tracking doesn't show any trends

Our internal findings tracking doesn't show any trends

Our USDA FSA's have gone well

Our 3rd Party Audits have gone well

EMOTIONAL COMPONENT

It couldn't have happened here

We have a great management staff

We have great employees

We have new equipment

We use Six Sigma

We have..... (fill in the blank)

BREAKING THE DENIAL DEADLOCK

- Supply objective evidence to show a trend, and/or how serious it is
- Confront the brutal facts
 - Foreign object reported was not different from materials in plant
 - The facility conditions were not as organized as could be
 - Facility operations were not well controlled
 - Appeal to the emotions of the situation

DELIVERABLES

Team Discussion and Brainstorm

- All Foreign Material Must Be Controlled

Foreign Material may be impossible to “see” with technology

The “Old Way” doesn’t work

- Put all reasonable controls in place to eliminate foreign material
- Begin Immediately

SIPOC

- Supplier
- Input
- Process
- Output
- Customer

CONTROL STRATEGY COMPONENTS

1. Facility Conditions
2. Incoming Materials
3. Operations including Sanitation
4. FM Detection Technologies
5. Information Management
6. Employee Training and Engagement



FACILITY CONDITIONS

- Facility Design
- Equipment Design
- Facility and Equipment Conditions

INCOMING MATERIALS (INPUT)

Water, Non-meat Ingredients (Spices, Dry Ice), Meat Ingredients, Packaging Materials (including pallets)

1. Risks inherent to incoming materials
2. Tamper proof packaging
3. Color coding
4. Letters of Guarantee
5. Certificates of Analysis
6. Raw material inspection – producer and receiver

SUPPLIERS

How much is each supplier trusted?

Is the Supplier's Operation Understood?

Approved?

Vendor Certification?

Open Communication?

Proven History?

- If unacceptable, there must be an immediate control strategy

FACILITY OPERATIONS (PROCESS)

Do Facility Operations Contribute to Foreign Materials?

1. Operator Work Practices
2. Transient Equipment
3. Equipment Operation
4. Maintenance Work
5. Sanitation

FOREIGN MATERIAL DETECTION

- Visual
- Metal Detection
- X-Ray
- Screens
- Magnets
- Sieves
- Vision Technology
- Other

INFORMATION MANAGEMENT

- Facility Assessment Teams
- Foreign Material Tracking
 - Internal Findings
 - External Findings
- Communication
 - Internal
 - External
- Trending
- Root Cause Analysis
- Corrective Actions

EMPLOYEE TRAINING

- All Employees must understand the problem reflective of job responsibilities
- FM Scorecards must be developed
- Information available
- Training for each employee on FM Job Responsibilities
- Knowledge Assessment



EMPLOYEE ENGAGEMENT

- Methods to Improve Engagement?
- Methods to change culture?

VENDOR SOLUTION #1

Facility Conditions Monitoring

- Senior FM Team – Monthly Meetings discussing Findings, FM Team Progress
- FM Taskforce – In-Plant Evaluation Team – Bi-weekly Meetings and Tours
- Pre-op Inspections – Daily with special emphasis on FM sources
- Meeting Minutes with
 - Root cause analysis
 - Corrective actions
 - Data Trending

VENDOR SOLUTION #2

Supplier and Ingredient Controls

- Letters to each vendor outlining FM controls expectation
- Letters of Guarantee verified
- Certificates of Analysis (as appropriate) verified
- Ingredient Screening - started
- Ingredient Visual Inspection - started
- Requested Same at Producer Location
- Maintained Database of Findings
- Opened Lines of Communication with Vendors re: FM Findings

VENDOR SOLUTION#3

Process Controls

- Inspections of facility – During Operations
- Raw material inspections – Visual Inspections
- Plant Improvement Initiatives – Action Items from FM Team
- Transient Equipment Control – Tool Accountability
- Wood Controls
- Sanitation – Transient equipment controls

VENDOR SOLUTION #4

Information Management

- Foreign Material Findings Database
- Includes both Internal and External Findings
- 5-Why style of Root Cause Analysis
- Corrective Actions Logged
- If recurrence, requires a different corrective action

VENDOR SOLUTION #5

Training and Engagement

- Employee Training
 - Job Specific – appropriate to task
- Employee Foreign Materials Team Recognition
- Employee Incentives
 - Free swag for finding FM Sources – any response gets swag
 - Great response – employees seem to really love it
- Culture Change
 - Much more employee knowledge and involvement in FM control

RESULTS

- Facility Very Well Organized
- Better Engaged Workforce
- Roughly 50% Reduction in Vendor Foreign Object Complaints



CONCLUSION

Its not “rocket science”

It requires hard work, attention to detail and solid programs

Above all, it demands an engaged workforce focused on foreign matter control

QUESTIONS?

