FOOD FRAUD: THE PATH TO COMPLIANCE

ReposiTrak and USP: Food Fraud Vulnerability Assessment and Mitigation Planning

January 24, 2018 – 1 to 2pm ET

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RED DIAMOND: COFFEE, TEA

- Founded in 1906 on Morris Ave in Birmingham, AL
- Fourth Generation Family Owned
- Rich Heritage of Innovation

RED DIAMOND: STILL GROWING TODAY

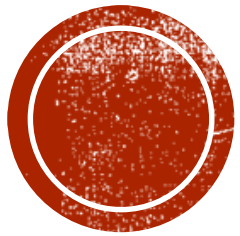
- New ~85 acre campus in St. Clair County in 2008
- Operates 3 distinct business divisions
- Distribution footprint in 48 states

FOOD FRAUD

Our journey

METHOD USED

http://www.usp.org/foods/food-fraud-mitigation-services



PRE-SCREENING

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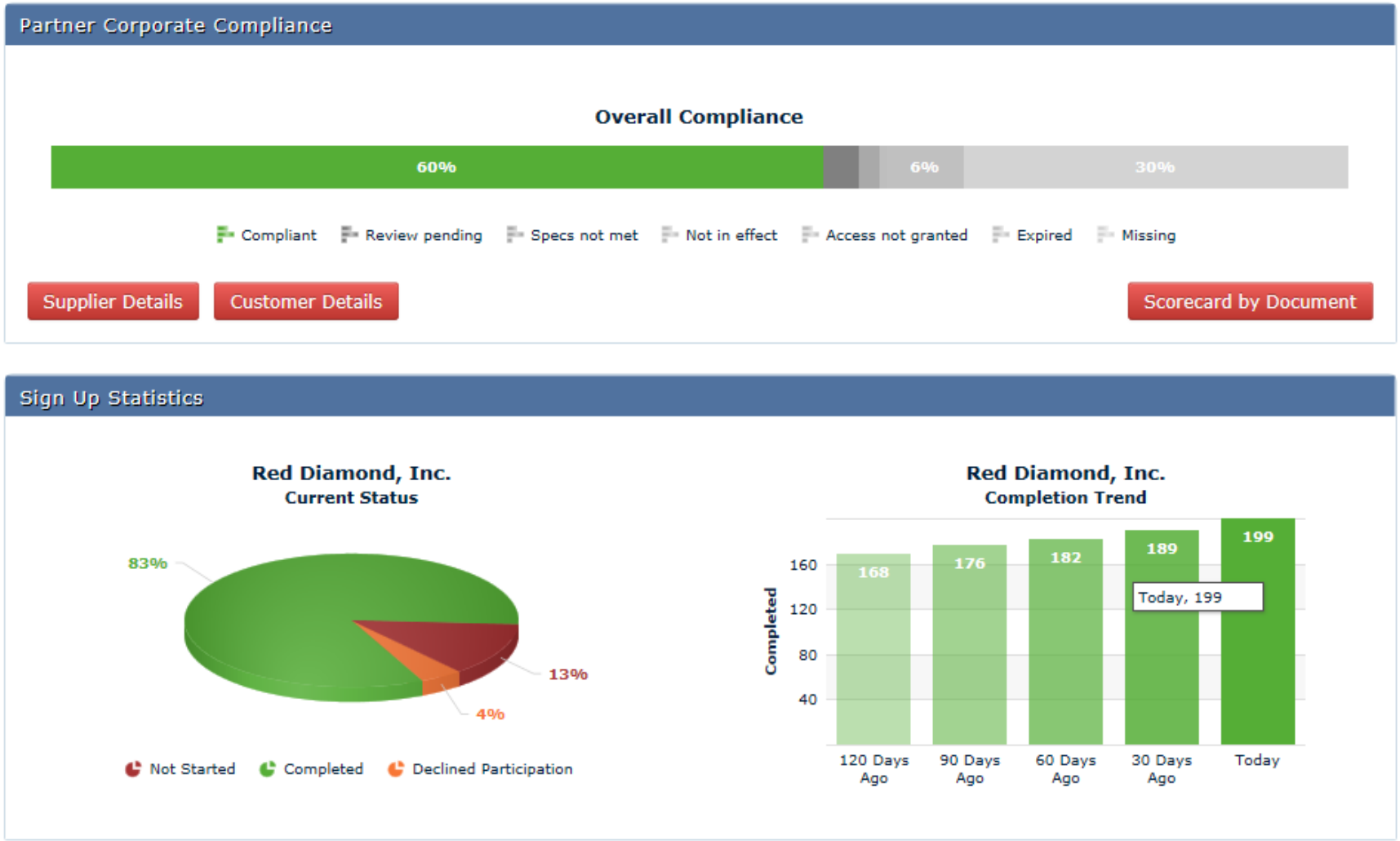
- Where do I start? (The prescreening)
  - Vendors
    - How many do we have and who are they?
    - What are the risks introduced by each vendor?
      - Are they GFSI Compliant?
      - Have you reviewed their history?
        - Recalls
        - Withdrawals
      - Have you reviewed their vendor approval program?
      - Are they compliant with your vendor approval program?

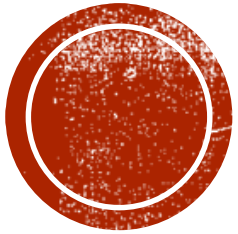
PRE-SCREENING

- We use ReposiTrak® to manage our vendors and their documents.
  - Review of compliance easier
    - Dashboards and exception alerts
  - New vendor approval process is faster
    - E-sign negates need to print, sign, scan and send back
  - Auto review verifies document contents vs. supplier submissions
    - For example, minimum level of insurance coverage
  - Categorization of vendors and their document requirements
    - By risk level (High, Medium, Low) and if a co-packer

PRE-SCREENING

Dashboard





VULNERABILITY & RISK ASSESSMENT

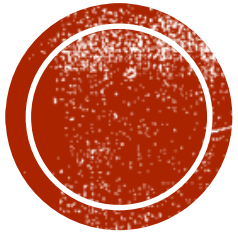
VULNERABILITY & RISK ASSESSMENT

- Once you have identified your "high risk" suppliers
  - Identify those ingredients that could have a large affect in your day-to-day business
  - Then identify which of those ingredients could have the highest potential of fraud:
    - Recalls
    - Withdrawals
    - Import Alerts
    - Trade organizations
    - Reportable Food Registry
    - USP Food Fraud Database - subscription

USP™ | FOOD FRAUD DATABASE

VULNERABILITY & RISK ASSESSMENT

- We use USPs Food Fraud Database
  - Makes it easier to look up your items
  - Faster than having to go through all the other recommended sources for information on fraud
  - You can set up notifications on if something on your list changes
    - Saves time on the question:
      - How often should I review my products for fraud?



OVERALL RISK

OVERALL RISK

- How does the potential fraud risk your business?
  - Is all fraud a risk to your business? (Yes / No)
  - Does the fraud you have found necessitate a mitigation plan?
    - Do not let emotions get in the way of your decision making
    - Use FMEA form to determine if you really need to mitigate the risk
      - How often does it happen?
      - Can you catch it in your testing protocol?
      - Has the fraud been detrimental to human health?
        - Grass clippings in tea
        - Peanut shells in cumin

OVERALL RISK: FMEA

- Determine how serious each effect is "S"
  - 1-10
- For each failure, determine root cause - - Root-Cause-Analysis (RCA)
  - 5-Whys or Fishbone
- For each cause, determine the occurrence rating "O"
  - 1-10
- For each cause, identify current process controls
  - Tests, procedures, or mechanisms

OVERALL RISK: FMEA

- For each control, determine the detection rating "D"
  - 1 (always detected) to 10 (never detected)
  - Estimates how well the controls can detect either the cause or its failure after they have happened, but prior to customer receipt
- Is failure mode associated with a critical characteristic?
  - Is a "Mitigation Plan" needed?
    - If severity is 9 or 10 and detection rating is above a 3.
  - "Y" or "N"

OVERALL RISK: FMEA

- Calculating risk priority number (RPN) = S (seriousness) x O (occurrence) x D (detection)
- Calculating criticality (CRIT) = S X O
  - These numbers provide guidance for ranking potential failures in the order they should be addressed
- Identify corrective actions
  - Design or process change lowering severity or occurrence
  - Maybe additional controls to improve detection
- List who is responsible and due date
- After a predetermined time, reanalyze new S, O, D ratings and new RPNs.

OVERALLOVERALL RISK: FMEA RISK

Function	Potential Failure Mode	Potential Effect(s) of Failure	S	Potential Cause(s) of Failure (RCA)	O	Failure Mode Needs Critical Characteristic (CCP) S = 9 or 10 D = >3 "Y" or "N"	Current Process Control(s)	D	RPN	CRIT	Recommendation(s)	Responsible Party & Target Completion Date	Action Result(s)						
													Action Taken	S	O	D	RPN	CRIT	Analysis Date

OVERALL RISK: FMEA

Function	Potential Failure Mode	Potential Effects(s) of Failure	S	Potential Cause(s) of Failure	O	Current Process Controls	D	RPN	CRIT	Recommended Action(s)	Responsibility and Target Completion Date	Action Results					
												Action Taken	S	O	D	RPN	CRIT
Dispense amount of cash requested by customer	Does not dispense cash	Customer very dissatisfied	8	Out of cash	5	Internal low-cash alert	5	200	**40**								
				Machine jams	3	Internal jam alert	10	240	24								
		Incorrect entry to demand deposit system		Power failure during transaction	2	None	10	160	16								
		Discrepancy in cash balancing															
	Dispenses too much cash	Bank loses money	6	Bills stuck together	2	Loading pro-cedure (riffle ends of stack)	7	84	12								
		Discrepancy in cash balancing		Denominations in wrong trays	3	Two-person visual verification	4	72	18								
	Takes too long to dispense cash	Customer somewhat annoyed	3	Heavy computer network traffic	7	None	10	210	21								
				Power interruption during transaction	2	None	10	60	6								

ECONOMICALLY MOTIVATED ADULTERATION (EMA) – MITIGATION PLAN

EMA MITIGATION PLAN

- We found it necessary to test our coffee and tea
- To determine if our products were free of adulteration, we chose DNA – whole genome sequencing
  - Results:
    - So far we have tested the tea
      - Other plant based materials?
        - Are they EMA and are they detrimental to human health - - NO
      - When do you choose to move forward with other testing?
        - Concentration of other materials
          - GCMS?
            HPLC?
  - How often should we test?
- POINT OF DIMINISHING RETURNS?????