


**Ray Pettit**

**Pettit Enterprises**

**Food Security**



**Practical Solutions for  
Protecting Food Companies  
Against BioTerrorism Attacks**

**Ray Pettit Enterprises**

American Society of Sugar Beet Technologists  
March 3, 2005  
Palm Springs

---

---

---


---

---

---

---

---



**Reframe Your View of Security**

Food Security is NOT  
an extension of  
Food Safety

---

---

---


---

---

---

---

---



**Usually Framed As ..**

- ❖ Food Safety = Prevention of accidental contamination
- ❖ Food Security = Prevention of malicious contamination

---

---

---


---

---

---

---

---



However

Food is **NOT** the enemy

People who would harm  
the company's interests  
are the enemy

---

---

---


---

---

---

---

---



Therefore ...

Security is about **people**

---

---

---

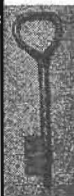
---

---

---

---

---



As Security Professionals  
We Ask ...

Who would want to harm the company's  
interests?  
Why?  
How?  
Where?  
When?

What can we do to prevent **them**  
from conducting any type of attack?

---

---

---


---

---

---

---

---



**More Enlightened Way  
to Look at Security**

Which security measures  
historically have proven  
to be the **MOST** effective  
at deterring  
the most likely attack scenarios  
which could cause the greatest harm  
to the company?

How are you going to know them?

---

---

---

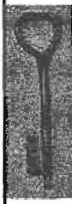
---

---

---

---

---



**Current Degree of Readiness Across  
Government and the Industry**

Considerable confusion about protecting

Confusing efforts with results

Unwarranted sense of readiness

Creating a self-fulfilling prophecy

---

---

---


---

---

---

---

---



**View Agency Regulations / Standards  
with a Different Security Perspective**

Fundamental difference  
between  
“prevention” and “response”

---

---

---


---

---

---

---

---



Examples of agencies referring to “prevention” but really meaning “response”

---

---

---

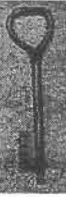
---

---

---

---

---



**Examples of This Confusion**

- ❖ “We’re developing the new medicines and vaccines to protect our citizens from disease or bioterrorism” (12/3/04)
- ❖ “The government is creating a new generation of technologies to guard against terror attacks on our food .. supply” (10/7/04)
- ❖ “New rules to protect the nation from a biological terrorist attack” (12/7/04)
- ❖ “Publication of this record-keeping rule represents a milestone in U.S. food safety and security. We have a lot of work yet to do, but our nation is now more prepared than ever before to protect the public against threats to the food supply” (12/6/04)
- ❖ “.. the risk of a terror attack on the food supply is low because of steps by the government to tighten its food security web” (12/6/04)

---

---

---


---

---

---

---

---



**The Focus Is On**

containment of the effects of an attack and protecting the public

**after** an attack ...

**not** on prevention

---

---

---


---

---

---

---

---



**Which of the Following Regulations Would Actually Prevent An Incident?**

Registration  
 Advance notice  
 Increased detention authority  
 Increased record keeping requirements

---

---

---


---

---

---

---

---



**Is There Really a Terrorist “Threat” to Contaminate our Food?**

- ❖ Because they “could” does not mean they will
- ❖ Difference between being vulnerable and a threat
- ❖ **Being vulnerable:** An attack **COULD** happen
- ❖ **A threat:** A specific engagement **HAS** occurred

---

---

---


---

---

---

---

---



**FDA Security Guidelines**

- ❖ 111 specific security standards
- ❖ No sense of which are most important
- ❖ No sense of type of attacker / methodologies
- ❖ “Good Security Practice” not identified
- ❖ Encyclopedia of “conventional wisdom”
- ❖ Many are not helpful
- ❖ Some are unhelpful
- ❖ but ...
- ❖ They have been accepted as the industry standard
- ❖ Customer, associations, 3<sup>rd</sup> party food safety audit checklists rephrased collections

---

---

---


---

---

---

---

---



### Array of Agency Suggested Security Standards

- ❖FDA
- ❖CTPAT
- ❖Department of Agriculture
- ❖FSIS
- ❖DOT
- ❖etc.

---

---

---


---

---

---

---

---



### 9/11 Commission Report

“The private sector remains largely unprepared for a terrorist attack.

“.. the lack of a widely embraced private sector preparedness standard (is) a principal contributing factor to this lack of preparedness.”

---

---

---


---

---

---

---

---



### Two Recent GAO Audits

Objective:

Determine why food security has not been more widely implemented across the industry

---

---

---


---

---

---

---

---



## GAO Audit Methodology

- ❖ Interviewed leading association officials
- ❖ Visited / audited **SIX** processing facilities
- ❖ Talked with agency food safety inspectors

---

---

---


---

---

---

---

---



## Findings

- ❖ Association officials:
  - ❖ Surveys showed much has been done
  - ❖ Industry leaders do **NOT** want regulations
  - ❖ Therefore: They are doing “a lot”
- ❖ **SIX** audits:
  - ❖ Found some things have been implemented
- ❖ Agency inspectors:
  - ❖ Not trained to even discuss security

---

---

---


---

---

---

---

---



## GAO Recommendations

1. Review statutory authority with congress
2. Train inspectors to be able to discuss security with facility managers

---

---

---

---


---

---

---

---





### Problems With the GAO Audits

- ❖ Confused effort with results
- ❖ Of course industry does not want to be regulated
- ❖ Association officials produced survey results which demonstrate that much has been done ...
- ❖ However, much of what has been done has had very little deterrent effect
- ❖ Did not audit the **effectiveness** of security

---

---

---


---

---

---

---

---



### Homeland Security Secretary Tom Ridge

January 25, 2005

- ❖ "Private industries have made some very significant investments to tighten security ..."
- ❖ "Critics say .. companies .. haven't done nearly enough to protect against an attack that could kill and injure tens of thousands of people."
- ❖ "company leaders know that if you don't do it in the foreseeable future, you'll be told to do it"

---

---

---


---

---

---

---

---



### Was Optimistic about the New FSIS Standards

Wanted to develop  
a set of standards  
that would be  
more credible,  
more industry friendly,  
and actually be implemented.

---

---

---


---

---

---

---

---

 However ...

more of the same

---

---

---


---

---

---

---

---

 Agency & Industry Focus Is On ...

Bioterrorist attack  
on the food industry  
by  
**terrorists**

---

---

---


---

---

---


---

---

 Recent Senior Official's  
Comments

"I worry it about it every night.  
For the life of me, I don't know why  
they haven't attacked our food supply yet."

"It would be so easy to do"

 (12/3/04)

---

---

---


---

---

---

---

---



### The Effect of Such Comments

---

---

---


---

---

---

---

---



### Effect of the Media

- ❖ Constantly highlighting ...
- ❖ Food industry's vulnerability
- ❖ Which bioterrorism agents best to use
- ❖ Where / how to acquire them

---

---

---


---

---

---

---

---



### For All the Well-Intended Motives ...

Public discussion of  
the industry's greatest vulnerabilities,  
most lethal bioterrorism agents,  
their characteristics / effects,  
for which we have no antidotes,  
how / where to acquire them

serve to ...

---

---

---


---

---

---

---

---



attract,  
encourage,  
enlighten,  
educate,  
inspire,  
taunt

the enemy

---

---

---


---

---

---

---

---



**“Human Safety Trial To Start On Vaccine For Deadly Toxin”**

- ❖ “.. as little as 500 micrograms of ricin – about what fits on the head of a pin – is enough to kill an adult. Lethal doses depend on how the poison is delivered – by powder, mist, pellet or dissolved in water.
- ❖ “The poison can be made from waste left from processing castor beans.”
- ❖ “Because castor beans are easy to obtain and the poison remains potent despite exposure to extreme temperatures, government officials worry that it could become a tool of terrorists.
- ❖ “Unless treated quickly, there is no antidote. Symptoms arrive late and can be confused with those of other illnesses.”

December 1, 2004

---

---

---


---

---

---

---

---



**Justification**

**“THEY already know all about these things.”**

Maybe some do  
but  
there are many others listening  
and learning

---

---

---

---

---

---

---

---

## Reuters: July 28, 2004 – Irvine, CA Gerber Baby Food Laced with Ricin

❖ "Two jars of Gerber baby food sold in Southern California tested positive for traces of the highly toxic poison ricin on Wednesday, prompting police to warn parents to check for tampering before serving prepared food to their children."

❖ First incident occurred May 31<sup>st</sup>

❖ Second incident occurred June 16<sup>th</sup>

❖ Why ricin?

❖ Why no public warning until July 28<sup>th</sup>?

---

---

---

---

---

---

---

---

## Effect of Open Discussions / Coverage

❖ What are the effects of pointing out our vulnerabilities / potency of bioterrorism agents / amount of damage possible / best possible attack scenarios?

❖ Encourages ...

❖ deranged members of society, and

❖ disgruntled employees

❖ to do the same thing the terrorists could do

❖ Are we sending the right message?

---

---

---

---

---

---

---

---



---

---

---

---

---

---

---

---



### Will Contend with a Variety of Customer Food Security Audits

- ❖ Each reflects their own view of the FDA guidelines and standards
- ❖ Many are developed by food safety people, not security experts
- ❖ Select security measures they believe are most important (“conventional wisdom”)
- ❖ Now also add weighting factors to the questions

---

---

---

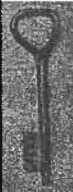
---

---

---

---

---



### Food Security Audits and Inspections

Are being conducted by food safety people, not security professionals.

Implications ...

---

---

---

---

---

---

---

---



### A Security Program May Look Adequate to the Casual Observer



---

---

---

---

---

---

---

---

 **But It May Not Function Very Well If It Is Ever Needed**



---

---

---


---

---

---

---

---

 **Fundamental Issue**

Long-term relationship of faith  
between you and your key customers  
supported by years of investment  
in effective food safety programs  
is now jeopardized  
by failing to meet expectations for  
your food security program

---

---

---


---

---

---

---

---

 **Their Message ..**

If we don't like your security program  
we are not going to buy from you any more

One major customer compares  
food security audit scores  
between its competing suppliers

---

---

---


---

---

---

---

---



**However ...**

many such customer audits  
do **not** reflect, emphasize or give credit for  
**Good Security Practice**  
and the most important measures  
to deter most likely attack scenarios

---

---

---


---

---

---

---

---



**Developed ...**

from a food safety / HACCP perspective  
but remember  
security is a very different discipline

**It's about people,  
not about food**

---

---

---


---

---

---

---

---



**Food Security Audit  
Sample Checklist Expectations**

- ❖ "Is access to the grounds of the facility restricted through the use of barriers, i.e. fences, walls, etc.? .. Is there a means to control vehicle access onto the property? .. If gates are used, are they locked when not in use?" (ConAgra)
- ❖ "Effective measures are taken to restrict unauthorized access to the grounds (intact security fencing, gates closed and locked, surveillance by camera and / or security guards, adequate lighting, company issued access cards, security patrols, etc." (WalMart)
- ❖ Improve onsite security programs such as restricting rights of entry and exit, locking up storage bulk ingredient containers and mounting video surveillance at important internal processing hubs. Provide metal or metal-clad doors on facilities." (McDonalds)
- ❖ "Is perimeter access protected with fencing or other appropriate deterrent?" (Yum! Brands)

---

---

---

---


---

---

---

---





### Major Food Company's Food Security Audit Checklist

- ❖ "Ensure that there are controls in place to verify the identity of new personnel joining the company, temporary employees and contractors."
- ❖ "All new employees should undergo induction training which should cover site and product security."
- ❖ "Is access to the site restricted to employees only, and are there entry restrictions to all manufacturing & storage areas"
- ❖ "Are all visitors identifiable and checked by a security service on arrival and departure"
- ❖ "Are there surveillance cameras on site, covering both external and internal key production areas"

---

---

---

---

---

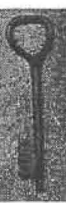
---

---

---

---

---



### Not Reflected ...

- ❖ Different Risk Levels
- ❖ Practical realities / constraints of physical layout
- ❖ The fact that not all security measures work against all types of potential attackers
- ❖ Whether the expected measures would really be effective or not

---

---

---

---

---


---

---

---

---

---



### Example of the Problem

---

---

---

---

---


---

---

---

---

---



1<sup>st</sup> Principle of Security

Confidentiality

---

---

---


---

---

---

---

---



What Would Happen If ...

- ❖ You asked to see the security details at the bank where you are a customer?
- ❖ You asked to see the security details at the airline / airport where you are a customer?

---

---

---


---

---

---

---

---



What are you going to do if a 3<sup>rd</sup> party auditor or an agency inspector asks to see a copy of your food security plan?

---

---

---

---

---

---

---

---



## Conclusion

- ❖ Agencies going after least likely scenario with tools that would not work
- ❖ Modest, if any, contribution to prevention
- ❖ Misplaced faith in “conventional wisdom”
- ❖ Vast amounts of money being spent
- ❖ None going to help industry prepare
- ❖ Industry making many improvements, but do they produce an effective deterrent?

---

---

---

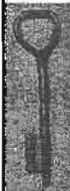
---

---

---

---

---



## How Could the Agencies Get It So Wrong?

These agencies,  
associations,  
3<sup>rd</sup> party food safety auditing companies  
are **not**  
security experts

---

---

---

---

---

---

---

---



## Would Be Like Asking ASIS \*

to develop standards  
for a food safety program

\* American Society for Industrial Security

---

---

---


---

---

---

---

---



**While the Official Focus  
is on a BioTerrorism  
Attack on the Food Industry ...**

The far more likely thing to happen  
is an internal attack  
by a **disgruntled employee**

---

---

---


---

---

---

---

---



**Disgruntled Employee**

- ❖ Has access
- ❖ Has knowledge
- ❖ Has opportunity
- ❖ Media may encourage him
- ❖ External security program does **not** protect you against what he can do
- ❖ Do **not** give him a reason
- ❖ He **CAN** do it if he gets angry enough

---

---

---


---

---

---

---

---



**Fortunately**

- ❖ Good Security Practices are also available to defend against the internal attack scenario
- ❖ Training in threat assessment
- ❖ Intervene early with consistent discipline
- ❖ Need to add security considerations to human resources policies / procedures
- ❖ Intervention protocols for handling dangerous, threatening situations

---

---

---


---

---

---

---

---



## My Recommendations

Calibrate Good Security Practice

Establish a commitment that  
"We secure to a higher standard"

Outline and begin implementing or improving a comprehensive, effective security program which also reflects the internal risk

Audit your own progress using an enlightened audit protocol

Meet with key customers to explain your commitment and review your suppliers & copackers

---

---

---


---

---

---

---

---



## Management Must Make A Choice

Do you build a security program to try to meet the evolving collections of security expectations from customers / 3<sup>rd</sup> party food safety auditors?

OR

Do you implement an effective security program which reflects Good Security Practice which will actually work if needed?

---

---

---

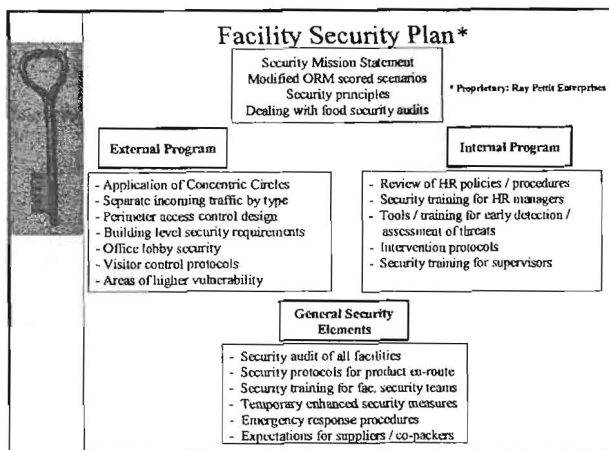
---

---

---

---

---




---

---

---


---

---

---

---

---



### Haunting Questions

- ❖ Would it matter whether a terrorist or a disgruntled employee added the agent?
- ❖ Would we ever know?
- ❖ How would we know at which link in the food chain the agent was added?

---

---

---


---

---

---

---

---



**We need a more enlightened approach**

---

---

---

---

---

---

---

---



### Security Consulting Services Available

Ray Pettit Enterprises

- ❖ Practical Security Solutions
- ❖ Facility Security Reviews
- ❖ Modified ORM Risk Assessments
- ❖ Security Team Training
- ❖ Protection Against Disgruntled Employees
- ❖ Security Conference for Suppliers
- ❖ Assistance with Threatening Situations

---

---

---


---

---

---

---

---



**Ensure ...**

1. Sound security measures being used
2. Maximize effective protection for the least possible cost
3. Your program will “work” if ever needed
4. Your suppliers’ security reflects the same level of effectiveness

---

---

---

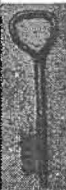
---

---

---

---

---



If you would like more information  
give me a business card  
after this session

**Thank You**

Ray Pettit Enterprises  
raypettiterprises@earthblink.net

---

---

---

---

---

---

---

---