### **Ten Supply Chain Changes**

Greg Hutchins PE
QualityPlusEngineering.com
800.COMPETE

### Who is Greg Hutchins?

- Principal with Quality Plus Engineering (Q+E), Portland Oregon based supply and project management company.
- Q+E is US Department of Homeland Security Certified/Designated for Critical Infrastructure Protection: Forensics, Assurance, Analytics™
- Addresses:
  - www.QualityPlusEngineering.com
  - www.ValueAddedAuditing.com
  - Gregh@europa.com or GregH@QualityPlusEngineering.com
  - 800.COMPETE
- Author of ISO 9000 (Wiley, translated into 8 languages),
   Standard Manual of Quality Auditing (Prentice Hall/ASQ), and
   Value Added Auditing (WIT)
- ASQ/IEEE/PMI Columnist

## Critical Infrastructure Protection Forensics – Assurance - Analytics



#### Certificate of Conformance

This will certify that, on this date, the United States Department of Homeland Security issued to

#### Quality Plus Engineering

An Oregon Limited Liability Company a Certification for its

Critical Infrastructure Protection Forensics/Assurance/Analytics<sup>™</sup> (CIP/FAA<sup>™</sup>) as an 'Approved Product for Homeland Security' under the

Support Anti-terrorism by Fostering Effective Technologies Act of 2002 (the SAFETY Act).

Westernam by Posternay Effective Technologies Act of 2002 (the SATETTACE)

Jay M. Cohen

Under Secretary for Science and Technology

# My Mission Critical Objective Today:

- Discuss major changes in:
  - Global business
  - Sourcing
  - Supply management
  - Supplier auditing
- Discuss why risk management is critical knowledge area for All quality professionals

### **USA Today: Public Safety Risk**











### USA Today's Lead Article TODAY

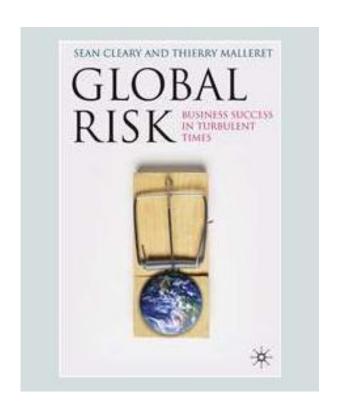
- "Kellogg says it's reviewing how it qualifies suppliers after a food-safety auditor it hired gave superior ratings in the Georgia peanut plant now at the center of one of the nation's largest food recall."
- "The FDA inspected the plant last month after the outbreak was detected and reported serious deficiencies."
- "Kellogg's auditor, the American Institute of Baking, says a superior rating doesn't mean that the auditors didn't find problems."

### The Rest of the Story

- "Kellogg's auditor, the American Institute of Baking, says a superior rating doesn't mean that auditors didn't find problems."
- "King Nut, which recalled PCA (Peanut Corp of America), sends employees to audit larger suppliers, but not ones as small as PCA."
- "PCA did supply King Nut and other customers with certificates attesting to the ingredient's quality."
- "PCA disputes the findings. It faces a federal criminal investigation."

# #1 - From Global Stability to Global Uncertainty





- Price of oil fluctuates
- World is flat or spiky
- Carbon emissions and global warming
- Financial crises
  - Black Monday January 27, 2009
  - 75,000 job loss
- NY Times "Deep Cuts Suggest That Employers Expect a Long Downturn"
- Result:
  - Rethinking of basics of offshoring and benefits of outsourcing

#### #2 - 'Made in China' to 'Made in USA'





- Offshoring to domestic sourcing
- Offshoring
  - Expensive
  - Risks
- Domestic sourcing
  - Lowers risk
  - Made in USA label
  - More control
  - Closer to sources

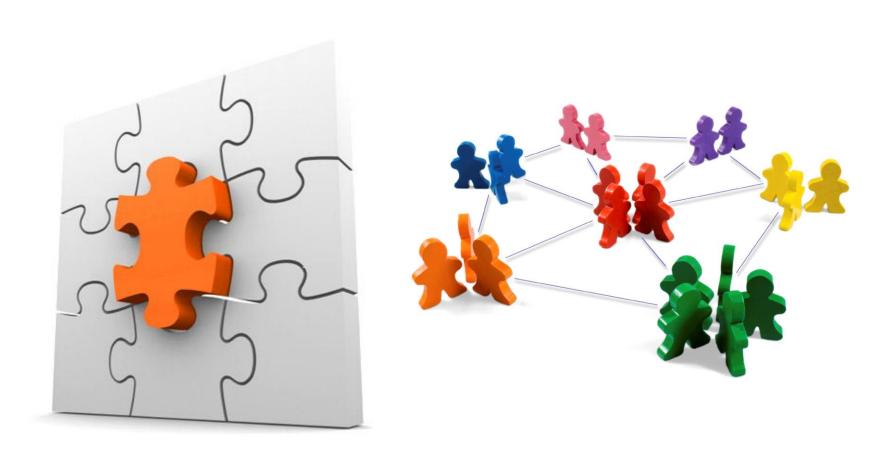
### #3 - Just in Time to Just in Case





- Just in Time
  - Lean supply chain
  - No buffer inventories
- Just in Case
  - What if
  - Risk analysis
  - Buffer inventories

### #4 - Single Source to Multiple Sources



- Single sourcing makes a lot of sense and offer value
- However, single source can result in supply risks
  - Earthquake in China
- All eggs in one basket
- No diversification of risk

# #5 - Stable Supplier Capability to World Class Capabilities





- Old supplier selection model was:
  - Make part within spec and meet business requirements
  - Transactional relationship
- New Model
  - Six sigma capability
  - World class risk management
  - Self certification
  - Risk based performance

## #6 - From Product Price to Risk/Reliability Decision Making





- Price or cost has been traditional method of selecting suppliers
- Now, risk is becoming critical component of selecting suppliers

## #7 - Looking Backward to Looking Forward





- Quality has compliance flavor
  - Historical focus
  - Past performance
- Risk management
  - Future focus
  - 'What if' analyses

## #8 - Supplier Trust to Supply Verification

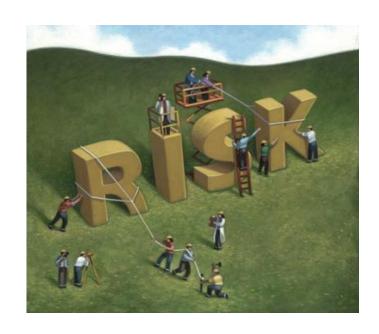




- Supplier trust is based on:
  - Long term, mutually beneficial relationship
  - Good products supplied
- Supplier verification
  - More audits
  - Trust but verify

### #9 - Quality Audits to Risk Audits

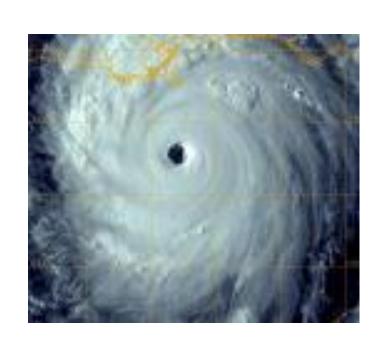




- Quality Audits
  - ISO 9000
  - Compliance based (still)

- Risk Audits
  - 'What if' audits
  - White space gaps and risks in supply chain

## #10 - Business as Usual To Business Continuity Management





- Supply chain disruption was not considered because of just in time philosophy of no buffer inventories
- Now, there are a lot more disruptions
- Solution is Business Continuity Planning

### Future of Supply Chain Management

- Risk is the primary filter for supply chain decision making
- Supplier auditing will mean more risk auditing
- Clients will want certification (assurance) suppliers comply with requirements
- Supplier auditors will need more training in risk management
- Focus on business continuity management
- Emphasis on being proactive, predictive, preemptive, and preemptive on supply risks

Critical Infrastructure Protection

Quality + Engineering

Forensics - Assurance - Analytics

## QUESTIONS?

## THANK YOU FOR THE INVITATION!

**Greg Hutchins**