

BLI2008: Suspect/ Counterfeit Items (S/CI) Awareness

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Objectives

To heighten general awareness of Suspect/ Counterfeit Items (S/CIs) through discussion of:

- Definitions of S/CIs
- Risks of using S/CIs
- S/CIs in the Global supply chain
- Types of S/CIs
- Visually detecting potential S/CIs (aka Visual Inspection)
- LBNL S/CI Policy and ways to protect against potential S/CIs
- LBNL Resources



Definitions

- A **suspect item** is one in which there is an indication by visual inspection, testing, or other information that it may not conform to established government or industry-accepted specifications or national consensus standards.
 - Suspect items must be investigated further to determine if they are counterfeit.
 - When an item contains indications, but there is insufficient evidence of irregularities, it may be declared suspect.
- A **counterfeit item** is a suspect item that is a copy or substitute without legal right or authority to do so, or one whose material, performance, or characteristics are knowingly misrepresented by the vendor, supplier, distributor, or manufacturer.



Risks of Using S/CIs

- Item pedigree and integrity is suspect
 - May not be traceable to quality requirements and standards
- Item may not have warranty for damage or failure
- May result in:
 - Unexpected failure
 - Operational problems and/or shut down
 - Rework
 - Waste
 - Delays
 - Mission impacts
 - Environmental impacts
 - Personal injury
 - Contamination
 - Death



S/CIs in the Global Supply Chain

- Increased use of the Global Supply Chain has increased the number of counterfeit items, components and systems used in industry.
- U.S. government has seen an increase in suspect and counterfeit items used in its components and assemblies over the past decade.
- In Fiscal Year 2013, the Department of Homeland Security seized counterfeit goods valued at over \$1.7 billion at U.S. borders.
 - Counterfeiting costs U.S. businesses \$200 billion to \$250 billion annually
 - Counterfeit merchandise is directly responsible for the loss of more than 750,000 American jobs
 - Since 1982, the global trade in illegitimate goods has increased from \$5.5 billion to approximately \$600 billion annually
 - U.S. companies suffer \$9 billion in trade losses due to international copyright piracy
 - Counterfeiting poses a threat to global health and safety
 - Approximately 5%-7% of the world trade is in counterfeit goods

Source: RMV Technology Group, LLC, Bob Vermillion, "The Silent Killer: Suspect/ Counterfeit Items and Packaging August 29, 2014" INCOMPLIANCE



S/CIs in the Global Supply Chain

- Counterfeit products are now as prevalent in the virtual world as they are in the real one.
- Counterfeit items are available through stand-alone websites, social media networks, and e-commerce platforms.
- The Internet provides unparalleled opportunities for illegitimate businesses to grow and reach consumers all over the world.
- Combating counterfeiting and piracy is a global challenge for the brand owner and law enforcement.

Source: International Anti-Counterfeiting Coalition website



Examples of S/CIs

The following are some examples of items that could be suspect or counterfeit that may be encountered at LBNL:

- Intellectual Property
 - Trademarks/ Patents/ Copyrights
 - Trade Secrets
 - Industrial Designs
- Electronic Components
 - Circuit chips
 - Wiring
 - Electro Static Equipment
 - Electrical Multi-plug outlets
 - Soldering Irons
- Building/Office Supplies/Equipment
 - Fire Extinguishers
 - Batteries
 - Extension Cords
 - Pallets



Examples of S/CIs

- Supplier Quality Documentation
 - Certificates of Conformance (aka Certificate of Compliance, Certificate of Conformity)
 - Inspection and Test Reports/ Results
 - Training/ Qualification Documentation
- Construction Materials
 - Equipment Fasteners (i.e. bolts and brackets)
 - Hoisting and rigging equipment (i.e. ratchet straps, tie down straps, slings, repelling equipment)
 - Transformers, circuit breakers, fuses, resistors, switch gear, fuses
 - Concrete materials
 - Metal struts
 - Pipe components, fittings, flanges, valves
 - Electrostatic flooring used in Clean Rooms or Computer Rooms
- Packaging Supplies
 - Boxes
 - Electro Static Bags



Visually Detecting Potential S/CIs

- Item or component matches the description of one listed on a suspect item list
- Item or component looks used or damaged
- Country of origin is China, Taiwan, India, Korea or Mexico
- An assembled piece of equipment or system's components fit poorly
- Manufacturer's name or identification is missing
- Metallic items are pitted or corroded
- Weld looks like it was repaired
- Casting marking appear to be grounded off
- Item has been re-stamped with a new marking
- Configuration is not consistent with other items from the same supplier or varies from what is stated in supplier documentation



Visually Detecting Potential S/CIs

- Packaging is damaged or inconsistent with the manufacturer's normal packaging
- Underwriters Laboratories (UL) marks are not present on the item
- UL marks are missing one or more of the four elements
- UL "listing" is in capital letter (i.e. LISTED)
- UL mark on the packaging but not on item
- Lettering or marking, in general, of similar items in the same box are inconsistent
- Size, shape and appearance of similar items in the same box are inconsistent
- Consensus standard used is obsolete
- Labels are missing or damaged
- Nameplates are attached with different fasteners



LBNL Policy: Protection Against Potential S/CIs

- Identify risk or importance of item, component or system
- Procure based on risk or importance
 - Items known to have been suspect or counterfeit in the past from qualified or dedicated suppliers (e.g. High-strength fasteners - graded bolts, screws, nuts and washers) must be:
 - Purchased directly through the Procurement Department
 - Segregated and secured from general stock
- Perform supplier Quality Assurance (QA) Program audit or evaluation
 - Contact the Office of Contractor Assurance (OCA) for assistance with supplier evaluations
 - Provides higher level of confidence that the supplier can:
 - perform as needed and/or
 - provide the items, components or systems in accordance to your requirements
- Use formal procurement mechanisms versus informal mechanisms for high-risk, critical or important items, components or systems
 - pCards or eBuy do not provide mechanisms to document and communicate specific requirements to suppliers



LBNL Policy: Protection Against Potential S/CIs

- Identify and document specific technical, quality, safety and business requirements/ specifications in procurement documentation
 - If requirements are not documented, supplier cannot be accountable for an item that does not perform as intended
 - If a widget is verbally requested and a widget is received, it is not necessarily suspect or counterfeit
- Identify and document supplier quality documentation required at different points in the procurement process
 - i.e. manufacturer's Certificates of Conformance (CoCs), inspection/ test plans or reports, manufacturer's travelers, training/qualification certificates, etc.
 - e.g. inspector training and qualification certificates may be required for review prior to issuing the contract, while a load test plan may required to be reviewed for approval after construction of an item but before the test is performed.
- Hold supplier accountable to contractual requirements

** If documented Quality, Technical, Safety and/or Business Requirements are not provided to the supplier, the item may not be suspect or counterfeit.*



LBNL Policy: Protection Against Potential S/CIs

- Perform inspections of facilities and equipment (e.g. self-assessments, inspections, testing, maintenance) to identify S/CIs
 - Review supplier Certificates of Conformance, inspection/testing results, etc.
 - Perform inspections or tests at point of origin
 - Source inspections
 - In-process inspections
 - Perform inspections or tests upon receipt
 - Visual Inspections
 - Material Testing
 - Dimensional Testing
 - Nondestructive Examination
 - Perform pre-operational inspections or tests prior to use
 - Base inspection or test acceptance criteria on technical, quality, safety and business requirements/ specifications documented in procurement documentation



LBNL Policy: Protection Against Potential S/CIs

- Contact OCA if an item is suspected of being suspect or counterfeit
 - OCA will work with appropriate organizations to:
 - Determine if item is an S/CI
 - Coordinate engineering evaluations, verification testing and disposition of items, as appropriate
- Disposition S/CIs (i.e. “Rework”, “Scrap” or “Use as Is”)
 - “Use as Is” (continued use) items require a documented justification from an engineer or technical expert and must be provided to OCA
 - “Scrap” items must be replaced by new parts. Work with Procurement to ensure the supplier provides a new part.
 - “Rework” items must be refurbished or repaired. Work with Procurement to ensure items are returned to the supplier for refurbishment or repair and then shipped back to LBNL.
- Report S/CIs to the Environmental Health and Safety Division (EHS) Occurrence Reporting & Processing System (ORPS) Coordinator for input into the ORPS database
- Enter S/CIs and corrective actions into the Corrective Action Tracking System (CATS) database



LBNL Resources

- Quality Assurance Policy (No. 04.03.001.000)
- LBNL Quality Assurance Program Description (QAPD, LBNL/PUB-3111)
 - Attachment C, Quality Clauses
- OCA Quality Assurance Webpage
 - <https://commons.lbl.gov/display/oiawebfiles/Quality+Assurance>
- OCA Suspect/ Counterfeit Items Webpage
 - <https://commons.lbl.gov/pages/viewpage.action?pageId=118587972>
- Procurement Department Restricted Items List
 - https://docs.google.com/a/lbl.gov/file/d/0B0b4uEAS_4iLbkRFU0s2ellZa00/edit?pli=1
- LBNL Assurance and Quality Program Manager

**Use the institutional Quality Assurance resources!
They are designed to ensure you get what you
need and that it performs as intended.*



Summary

- Evaluate potential supplier QA Programs to determine their capability to perform as intended and provide items and services that meet requirements
- Document detailed quality, technical, safety and business requirements and provide to suppliers via formal procurement mechanisms
- Inspect or test items at the point of origin or receipt to detect potential S/CIs
- Notify OCA of all potential and actual S/CIs
- Disposition and segregate S/CIs appropriately
- Report S/CIs to ESH ORPS Coordinator
- Enter S/CIs and corrective actions into CATS
- Use institutional Quality Assurance and S/CI resources

