

Impact of Primary Packaging Material Quality on a 24H/7D Continuous Production Scheme

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Dissecting the Presentation Topic

Primary Packaging Material Quality

- Point of View - Final Product Manufacturer
- Purchased Materials
- Supplier Quality Management and Incoming Quality Assurance

Purchasing Controls - Quality System Element

- Secondary Packaging, Contract Packaging
- All Purchased or Otherwise Received Materials and Services

Impact on a 24H / 7D Continuous Process Scheme

- Purchasing Materials Manufactured by a Continuous Process
- The Application of Purchasing Controls when Manufacturing in a Continuous Process Environment

Purchasing Controls – A U.S. FDA Concern

As stated in, The Silver Sheet, Vol. 11, No. 5 (May, 2007),

Supplier Control Problems are on the rise and may be contributing to an increase in medical device recalls. To combat the trend, FDA has begun emphasizing to industry the importance of complying with purchasing controls.

Kim Trautman

U.S. FDA

U.S. Purchasing Control Regulations

Guidance for Industry – Quality Systems Approach to Pharmaceutical CGMP, September 2006

- “A robust quality system will ensure that all inputs to the manufacturing process are reliable because quality controls will have been established for the receipt, production, storage and use of all inputs.”
- “The quality systems model calls for the verification of the components and services provided by suppliers and contractors.”

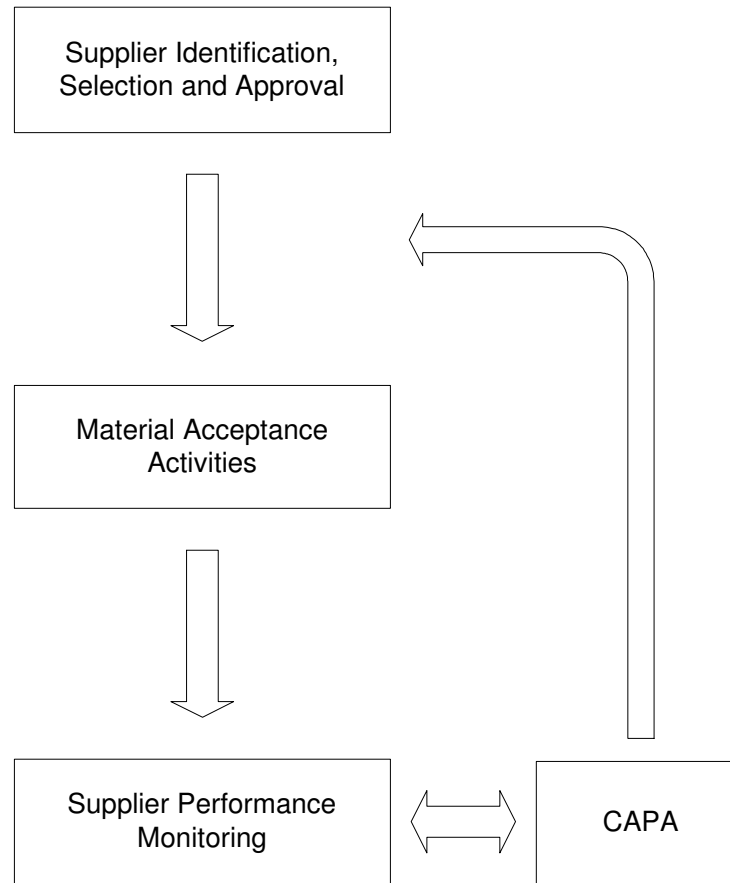
Drugs – C.2 Examine Inputs

- 21 CFR 210.3(b), 211.80-94, 211.101,122,125

Medical Device Quality Systems Regulation

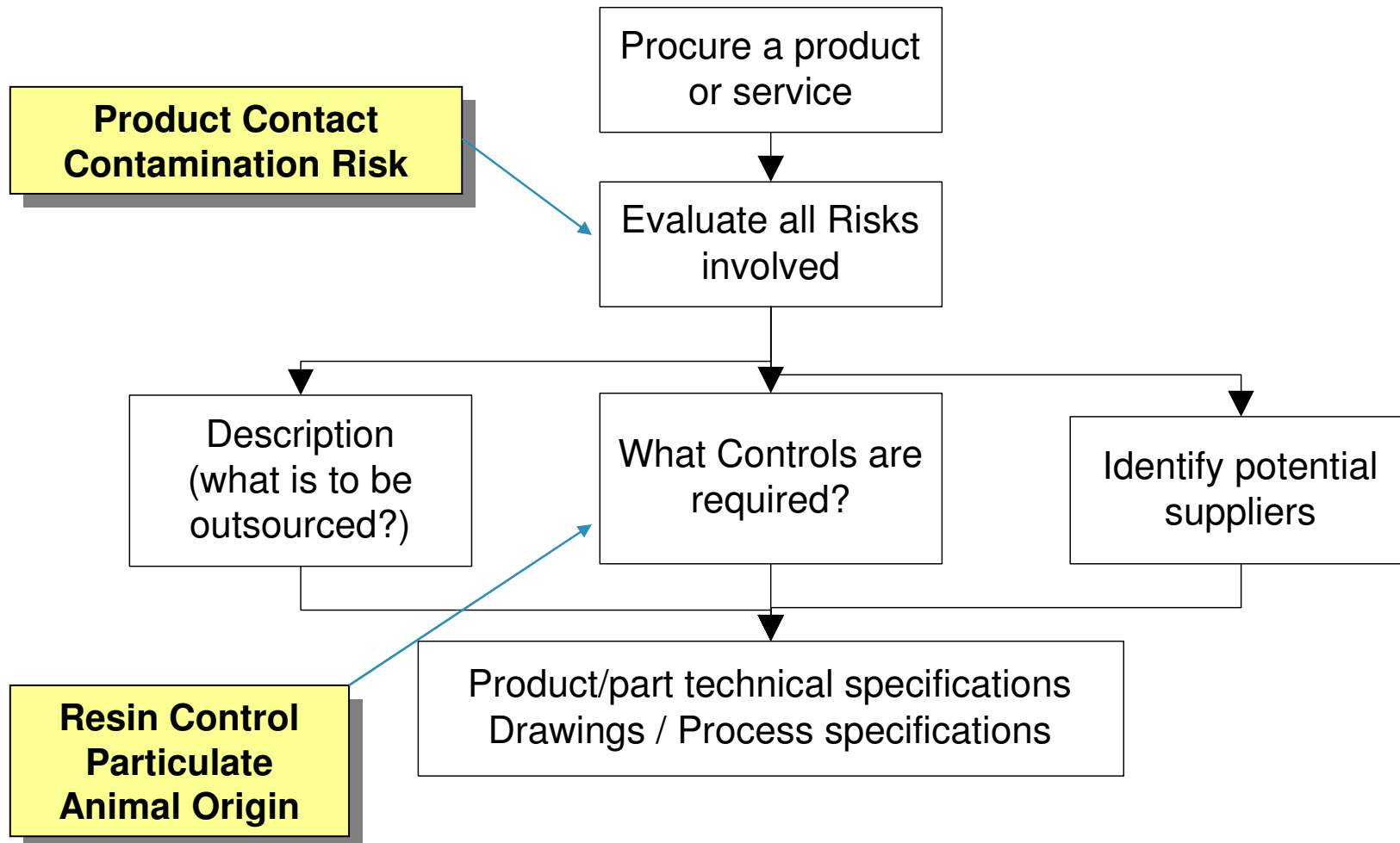
- 21 CFR 820.50 (Purchasing Controls)

Purchasing Controls – Simple 3 Step Process Map



Specific Comments Regarding Primary Packaging Components will be Highlighted in the Next Few Process Slides.

Step 1.a – Supplier Identification (Planning)



Planning - Understand Your Business and Regulatory Environment

Where do you manufacture your product?

- International / Domestic

Where do you market your product?

- International / Domestic

What stage of production are you operating in?

- R&D, / Clinical / Commercial

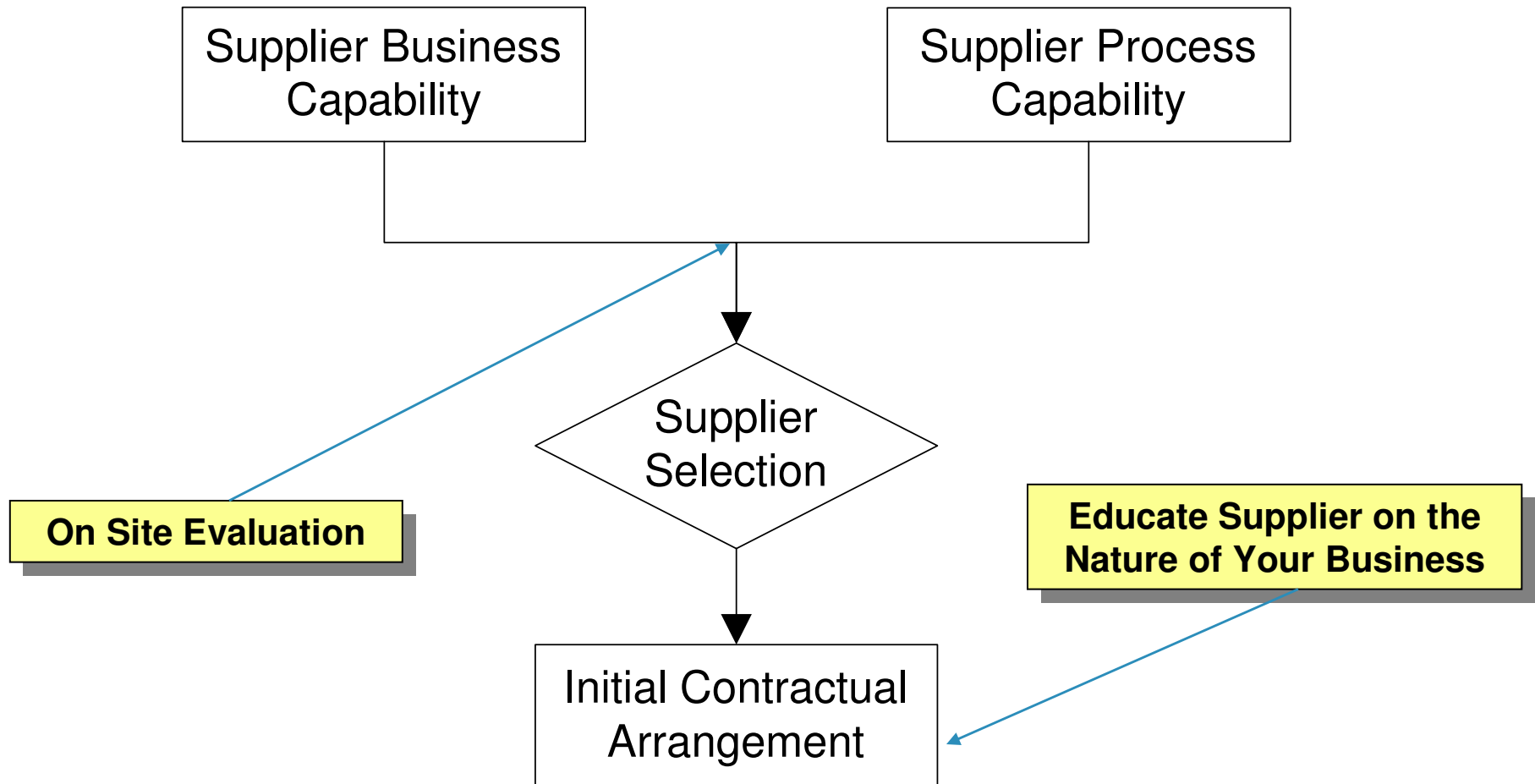
How is the product licensed and regulated?

- Drug / Device / Combination Product / Nutritional

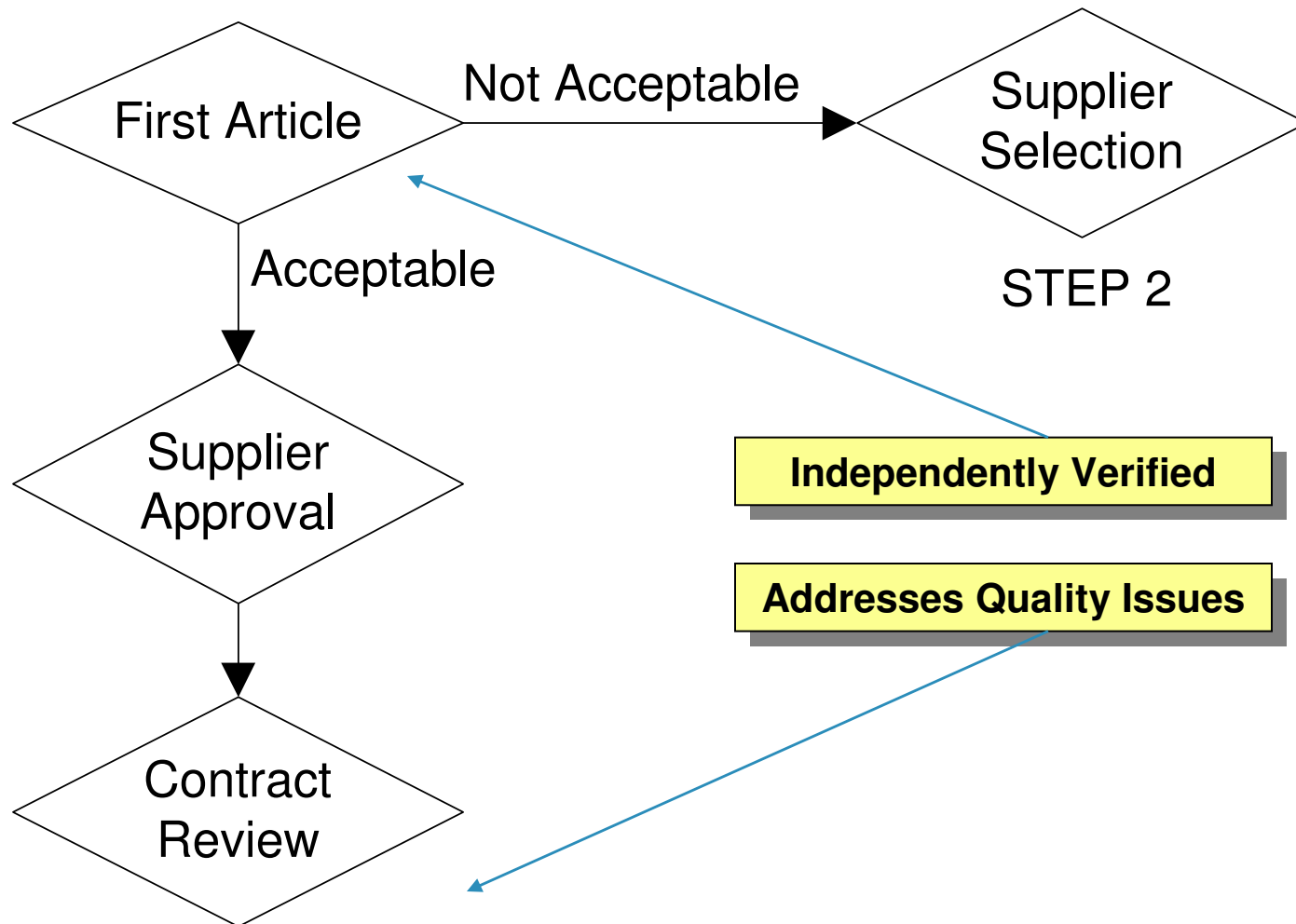
How well do you understand the supply chain?

- Subcontracting / Origin of Animal Sourced Materials

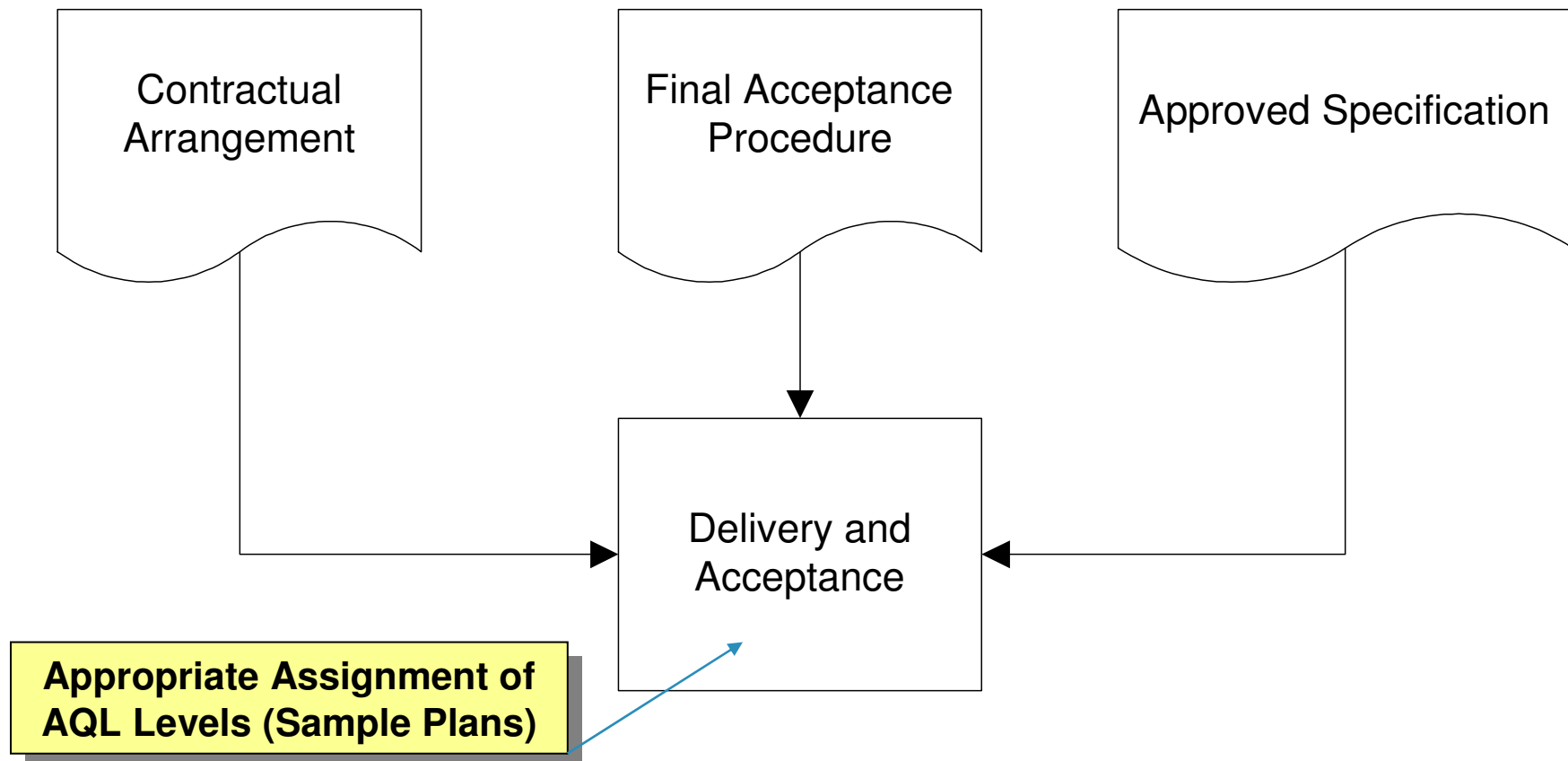
Step 1.b - Supplier Selection



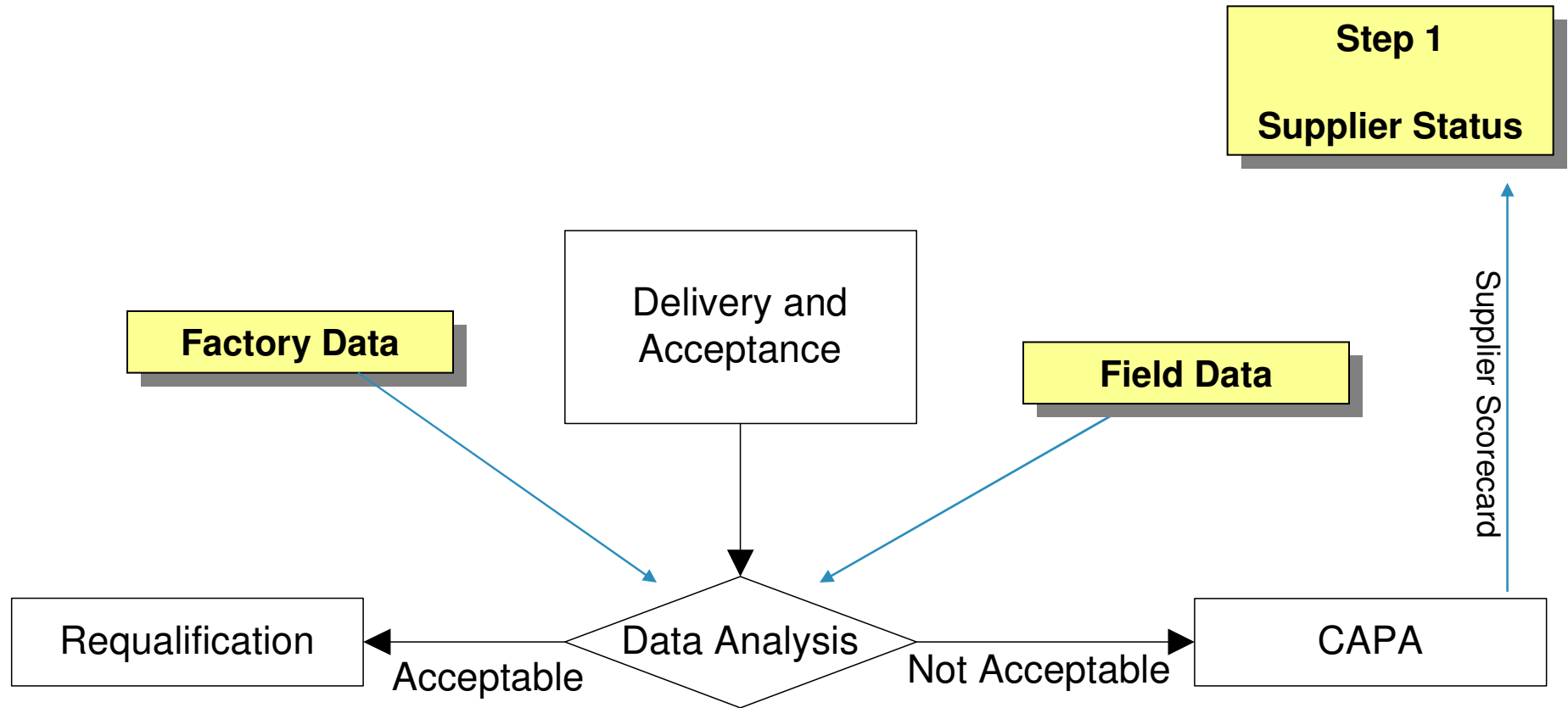
Step 1.c - Supplier Approval



Step 2 – Material Acceptance



Step 3 – Supplier Monitoring (Communication)



Impact on a 24H / 7D Continuous Process Scheme

Application of Purchasing Controls when Manufacturing in a Continuous Process Environment

- Understand the Supplier's Definition of a, "Lot"
- Understand if the Supplier has a Skip Lot Testing Program
- Assign IQA Sample Plans Accordingly
- Be Cautious if Lot Acceptance is Based on Certificate of Analysis
- Agree on Supplier Notification of Change Expectations
- Stop and Investigate Non-Conformances
- Understand Material Segregation Processes
- Expect Suppliers to Comply with Purchasing Control Requirements

Non-Conforming Raw Materials Can Result in Process Interruptions, Product Failure and Recall

Effective Supplier Quality Programs

4 Basic Elements

1. Supplier Quality Policy / Procedure (GMP)

- Develop with cross-functional team
 - Warehouse Personnel, QA Laboratory Technicians, Supplier Auditors, Purchasing Agents, Materials Management Staff and even Key Suppliers

2. Supplier Management Tool

- Approved Supplier List (System Database)
 - Part 11 Compliant / Controlled Access / Change Control

3. Risk Based Strategy

- Supplier Tier Structure / Classification

4. Comprehensive Supplier Evaluation Approach

- Audit of the supplier's quality system
- Evaluation of the material or service provided

Supplier Management Tool

Necessary Database Input (Supplier Name)

Contact Information

- Primary Contact (Multiple Contacts for Contractors)

Manufacturing Location (City / State)

- Site of Manufacturing Operations (Building)

Purchased Material Supply Chain

- Distributors / Co-manufacturers / Sub-Contractors

Materials Provided

- Type of Material or Service (Specific Code Numbers)

Supplier Tier / Classification

Risk Based Strategy

Excellent use of Resources

Supplier Category – Type of Supplier

- Material Supplier - Active Pharmaceutical Ingredient, Intermediate, Chemical, Compound, Excipient, Label, Container, Enclosure
- Service Supplier – Consultant, Calibration, Cleaning, Sterilization Service, Contract Laboratory, Distributor, Packager, Manufacturer

Supplier Status

- Purchase History, Non-conformances, Audit Rating, Audit History, Supplier Regulatory Information

Criticality

- Where Used, Volume / Frequency of Use, Single / Sole Source, Certified Supplier, High Risk

Comprehensive Supplier Evaluation Approach

A Continuous Process

Supplier Evaluation – Documented independent assessment of a supplier's quality system

- Onsite Inspection
- Questionnaire / Survey / Quality History Review
- Establish a Frequency of Reassessment

Verification that Supplier Understands Your Requirements

- Material Specifications (Mutually Agreed Upon)
- Contracts (For All Service Suppliers)
- Quality Agreements (Contract Manufacturers)

Auditing Suppliers

“Properly trained and qualified auditors are at the heart of any audit process.”

- PDA Supplier Auditing & Qualification Task Group

Hire Qualified Auditors and Train to Specific Company Requirements

- ISO, CQA, CISA, QS-9000, CE-Mark

Auditing Contract Manufacturers

- Typically there are frequent on-site visits associated with the sponsor - contractor arrangement
- Remain Objective

Effective Supplier Quality Programs

Making Improvements

Benchmark Supplier Quality Programs

- Include your suppliers, customers and peer companies in the review
- Attend outside conferences
- Participate in industry groups

Monitor Industry Trends

- FDA warning letters and 483s activity (Internet)
- Review new guidance documents
- Make adjustments to your program as needed

Communication with Your Suppliers is the Key

The Supplier is an Extension of Your Business

- Primary Packaging, Secondary Packaging, Contract Packaging
- All Purchased or Otherwise Received Materials and Services

Effectively Manage Suppliers

- They provide materials and services that have the potential to affect the quality, safety, effectiveness or reliability of your product.
- The impact in a continuous process environment is greater.
- Manage suppliers using a risk based strategy.

Effectively Communicate Your Expectations to Suppliers

- Educate suppliers on the nature of your business
- Establish Written Specifications, Service Contracts and Quality Agreements

