

Network Quality Package Contents

1. Manual: over 140 pages

2. SOPs:

- Training for GxP, 21 CFR Part 11, and Computer Validation
- Risk Assessment for Systems Used in GxP Environments
- 21 CFR Part 11 – Scope and Controls
- Development and Maintenance of Test Scripts for Equipment Hardware, Software and Systems
- Testing File Integrity of E-Mail Attachments
- Validation of Commercial Off-the-Shelf (COTS) Computer Systems
- Auditing Computer Systems
- Change Control for Networks and Systems – Planned Changes
- Change Control for Networks and Systems – Unplanned Changes
- Risk-Based Qualification of Network Infrastructure
- Handling Security Patches
- Qualification of Client PCs
- Qualification of Data Centers

3. Gap Analysis/Checklists:

- Qualification of Networks and Validation of Networked Systems
- Using Computers in FDA-Regulated Environments
- 21 CFR Part 11: Electronic Records & Signatures
- Cross Check Your Network Documentation with the OSI-Layer Approach

4. Templates/Examples:

- Network Infrastructure and System Identification
- Test Protocol – Authorized System Access
- Complete Validation Example: Win MD5 Software
- Network Qualification Project Schedule
- Requirement Specifications Data Systems

5. US FDA Regulations

- **Food**
 - ✓ 21 CFR 106
Infant Formula Quality Control Procedures
Revised as of April 1, 2001
 - ✓ 21 CFR 107
Infant Formula
Revised as of April 1, 2001

- ✓ 21 CFR 110
Current Good Manufacturing Practice in Manufacturing
Packing and Holding Human Food
Revised as of April 1, 2001
- ✓ 21 CFR 113
Thermally Processed Low Acid Foods Packaged in Hermetically
Sealed Containers
Revised as of April 1, 2001
- ✓ 21CFR 114
Acidified Foods
Revised as of April 1, 2001
- ✓ 21 CFR 123
Fish and Fishery Products
Revised as of April 1, 2001
- ✓ 21 CFR 129
Bottled Drinking Water
Revised as of April 1, 2001
- **Good Laboratory Practice**
 - ✓ 21 CFR 58
Good Laboratory Practice for No Clinical Laboratory Studies
Revised as of April 1, 2001
- **Good Manufacturing Practice**
 - ✓ 21 CFR 210
Current Good Manufacturing Practice in Manufacturing
Processing, Packaging or Holding of Drugs
Revised as of April 1, 2000
 - ✓ 21 CFR 211
Current Good Manufacturing Practice for Finished
Pharmaceuticals
Revised as of April 1, 2000
- **Good Clinical Practices**
 - ✓ 21 CFR 50
Protection of Human Subjects
Revised as of April 1, 2001

- **Medical Device**
 - ✓ 21 CFR 803
Medical Device Reporting
Revised as of April 1, 2002
 - ✓ 21 CFR 806
Medical Devices – Reports of Corrections and Removals
Revised as of April 1, 2002
 - ✓ 21 CFR 808
Exemptions from Federal Preemption of State and Local Medical Device Requirements
Revised as of April 1, 2002
 - ✓ 21 CFR 814
Premarket Approval for Medical Devices
Revised as of April 1, 2001
 - ✓ 21 CFR 820
Quality System Regulation
Revised as of April 1, 2001
- **Electronic Records & Signatures (Part 11)**
 - ✓ 21 CFR 11
Electronic Records – Electronic Signatures
1997
- **New Drugs**
 - ✓ 21 CFR 310
New Drugs
 - ✓ 21 CFR 312
Investigational New Drug Application
 - ✓ 21 CFR 314
Applications for FDA Approval to Market a New Drug
- **Animal Drugs**
 - ✓ 21 CFR 510
New Animal Drugs
 - ✓ 21 CFR 511
New Animal Drugs for Investigational Use
 - ✓ 21 CFR 514
New Animal Drug Applications

- **Other US FDA Regulations**
 - ✓ 21 CFR 1
Exports: Notification and Recordkeeping Requirements
 - ✓ 21 CFR 56
Institutional Review Boards – Table of Contents

6. US FDA Guidelines

- **Related to Computer Validation and Part 11**
 - ✓ Computer and Software Validation
 - ✓ 21 CFR Part 11
 - ✓ Policy/Inspection Guides Computer Systems
- **Computer and Software Validation**
 - ✓ Guidance for Industry
General Principles of Software Validation
January 2002
 - ✓ Guidance for Industry
Computerized Systems Used in Clinical Trials
September 2004
 - ✓ Reference Material for Inspectors
Glossary of Computerized System and
Software Development Technology
 - ✓ FDA Guidance
 - ✓ Cyber Security for Networked Medical Devices Containing Off-the-Shelf (OTS)
- **E-Records/Signatures 21 CFR Part 11**
 - ✓ Guidance for Industry
21 CFR Part 11: Electronic Records; Electronic Signatures, Scope and Applications
September 2003 (final)
 - ✓ Compliance Policy Guide
Enforcement Policy: Electronics Records; Electronic Signature – Compliance Policy Guide; Guidance for FDA Personnel
Compliance Policy Guide (CPG) Section 160.850
1999 (withdrawn)

- ✓ Guidance for Industry
21CFR Part 11; Electronic Records; Electronic Signatures
Glossary of Terms
August 2000 (draft) (withdrawn)
- ✓ Guidance for Industry
21 CFR Part 11; Electronic Records; Electronic Signatures,
Time Stamps
March 2002 (draft) (withdrawn)
- ✓ Guidance for Industry
21 CFR Part 11; Electronic Records; Electronic Signatures;
Maintenance of Electronic Records
July 2002 (draft) (withdrawn)
- ✓ Guidance for Industry
21 CFR Part 11: Electronic Records; Electronics Signatures,
Electronic Copies of Electronic Records
July 2001 (draft) (withdrawn)
- **Compliance Policy & Inspection Guides Computer Systems**
 - ✓ Compliance Program Guidance Manual, Attachments A
Good Laboratory Practice – Bioresearch Monitoring
Computerized Systems
February 2001

7. Other Regulations, Standards and Private Publications

- **US Laws/Regulations**
 - ✓ ESIGN Act
 - ✓ Sarbanes Oxley
 - ✓ Federal Food, Drug, and Cosmetic Act
(As amended through P.L. 106-540, December 8, 2000)
 - ✓ US Environmental Protection Agency (EPA)
Cross-Media Electronic Reporting and Recordkeeping Rule
(CROMERRR)
Establishment of Electronic Reporting; Electronic Records
Proposed Rule, 2000
 - ✓ 45 CFR 142
HIPAA – 1996

- ✓ 45 CFR 160 and 164
Standards for Privacy of Individually Identifiable Health Information
Security Standards for the Protection of Electronic Protected Health Information
- **European and International Regulations/Guidelines**
 - ✓ Annex 11 of EU GMP
Computerized Systems
Requirements are somewhat similar as 21 CFR Part 11
 - ✓ AVP Interpretation of EU GMP Annex 11
Annex 11 of EU GMP Interpretation
Annex 11 of the EU GMP directive specifies requirements for computer use in GMP regulated environments. The International Association for Pharmaceutical Technology (AVP) has developed this 27 page interpretation guide for easier implementation
- **NIST**
 - ✓ Risk Management Guide for Information Technology Systems
 - ✓ Guidelines on Electronic Mail Security
 - ✓ Contingency Planning Guide for Information Technology Systems
 - ✓ Procedures for Handling Security Patches
 - ✓ Guidelines on Firewalls and Firewall Policy
 - ✓ Wireless Network Security: 802.11, Bluetooth, and Handheld Devices
 - ✓ Guideline on Network Security Testing
- **Industry Standards**
 - ✓ IVT Proposed Standard
- **Private Publications**
 - ✓ Qualification of Network Components and Validation of Networked Systems

8. Warning Letters/483s

9. Video – Qualification and Validation of Databases and Networked Systems

10. Audio Seminar: Network Infrastructure Qualification

11. On-line Updates (need ID & password and must be on-line)

12. Validation Master Plan: Equipment and Computers