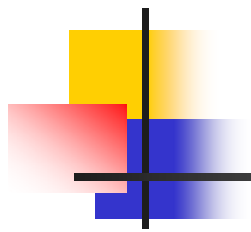


Quality Assurance Training for DOE O 414.1A and Rule 10 CFR 830, Subpart A

Instructor:



The Quality Assurance Program Is a Total Management System



The Quality Assurance Program Is a Total Management System

It's About People

Common Sense



Learning Objectives

- Ability To Articulate the Underlying Principles of Quality Assurance
- Understand How QA, Price-Anderson Amendments Act, and Integrated Safety Management fit together
- Have Knowledge of the QA Basic Requirements
- Ability To Apply QA to Your Work



Definitions

Quality:

The Degree to Which an Item or Process Meets or Exceeds the User's Expectations

Quality Assurance:

All Those Actions That Provide Confidence That Quality Is Achieved

Quality Assurance Program:

A Management System That Serves As an Action Plan for Management's Mission, Policies, and Objectives



Definitions (continued)

System:

A set of interrelated processes

Total:

Whole; entire; complete.

Management System:

A set of interrelated processes that consistently provides personnel what they need to perform work which results in a consistent product or service provided.



Quality Assurance Underlying Principles

1. Define policies and objectives. Ensure they are understood and accepted.
2. Specify roles, responsibilities, and authorities. Ensure they are understood and accepted.
3. Specify and communicate expectations. Identify and allocate resources to achieve them.
4. Strive to improve.



Quality Assurance

Underlying Principles (continued)

5. Ensure people are competent at the work they do.
6. Ensure the right people have the right information at the right time.
7. Seek and use relevant experience.
8. Plan and control the work.



Quality Assurance

Underlying Principles (continued)

9. Use the right materials, tools, and processes. Control any changes to them.
10. Assess work to ensure it meets expectations.
11. Identify and remedy errors and deficiencies.
12. Periodically review management processes to improve effectiveness and efficiency.



Price-Anderson Amendments Act Underlying Principles

- Compliance and safety is a contractor responsibility
- Participation in the self-reporting process is voluntary and through contractor initiative
- The American public expects that work carried out on their behalf will be done correctly and safely
- By establishing strong quality and Nuclear Safety programs everyone benefits



Price-Anderson Amendments Act Purpose

- Promotes protection of the environment, health, and safety of the public and workers
- Indemnifies (insures) DOE contractors against public liability due to a nuclear incident
- Establishes nuclear safety requirements
- Provides DOE enforcement authority



Integrated Safety Management Underlying Principles

- Line Management Responsibility for Safety
- Clear Roles and Responsibilities
- Competence Commensurate with Responsibilities
- Balanced Priorities
- Identification of Safety Standards and Requirements
- Hazard Controls Tailored to Work Being Performed
- Operations Authorization



Integrated Safety Management Core Functions

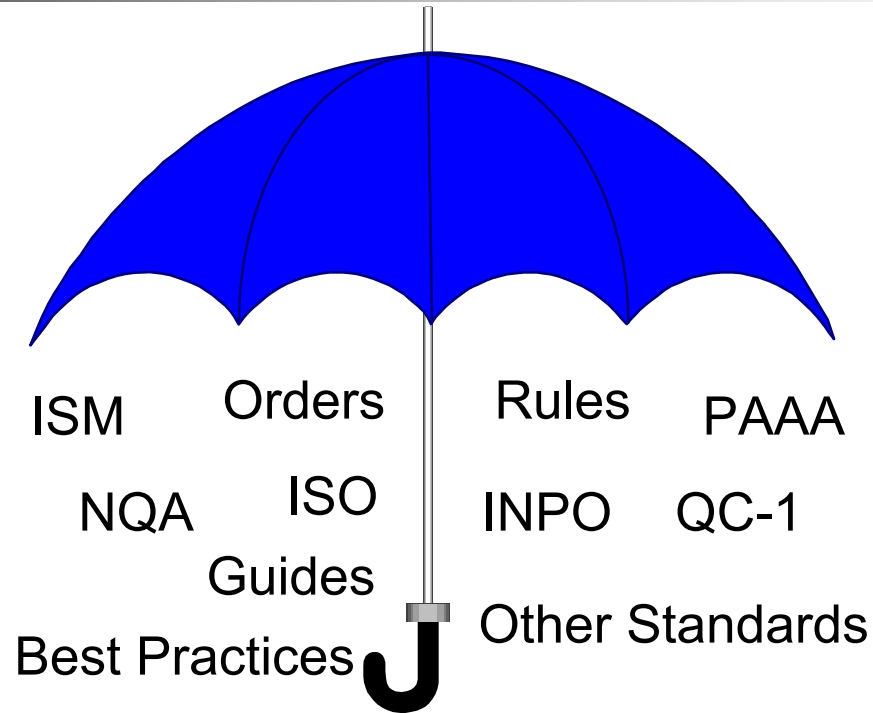
- Define the Scope of Work
- Analyze the Hazards
- Develop and Implement Hazard Controls
- Perform Work Within Controls
- Provide Feedback and Continuous Improvement



Expectation

- A Total Management System integrates systems, programs and processes utilizing Orders, Rules, other applicable Standards and Guides, and Best Industry Practices (Orders, CFR's, PAAA, ISM, ISO, NQA, QC-1, INPO, etc.) to achieve safe, reliable results.

Total Management System





DOE QA Culture

- Quality is everyone's responsibility
- Managers, workers, and those assessing the work all contribute to quality in a concerted and cost effective manner
- Achieving quality products and services is the measure of success
- Quality is “built in” by providing every person the right training, resources, and motivation to do the job right the first time
- Those assessing the work are technically knowledgeable and performance oriented with their primary focus on improving quality



WHO IS RESPONSIBLE FOR
QUALITY ASSURANCE?

MANAGERS

RESPONSIBLE AND ACCOUNTABLE FOR ALL ASPECTS OF
QUALITY OF PERFORMANCE, INCLUDING PLANNING,
ORGANIZATION, DIRECTION, CONTROL, AND SUPPORT

PERFORMERS

RESPONSIBLE FOR ACHIEVING QUALITY OF
PERFORMANCE SO AS TO ENSURE SAFETY AND
RELIABILITY

ASSESSORS

RESPONSIBLE FOR EVALUATING EFFECTIVENESS TO
ACHIEVE QUALITY OF PERFORMANCE, IDENTIFY
DEFICIENCIES, AND ENSURE CORRECTIONS



Quality Assurance

BASIC REQUIREMENTS

MANAGEMENT

- PROGRAM
- PERSONNEL TRAINING & QUALIFICATION
- QUALITY IMPROVEMENT
- DOCUMENTS & RECORDS

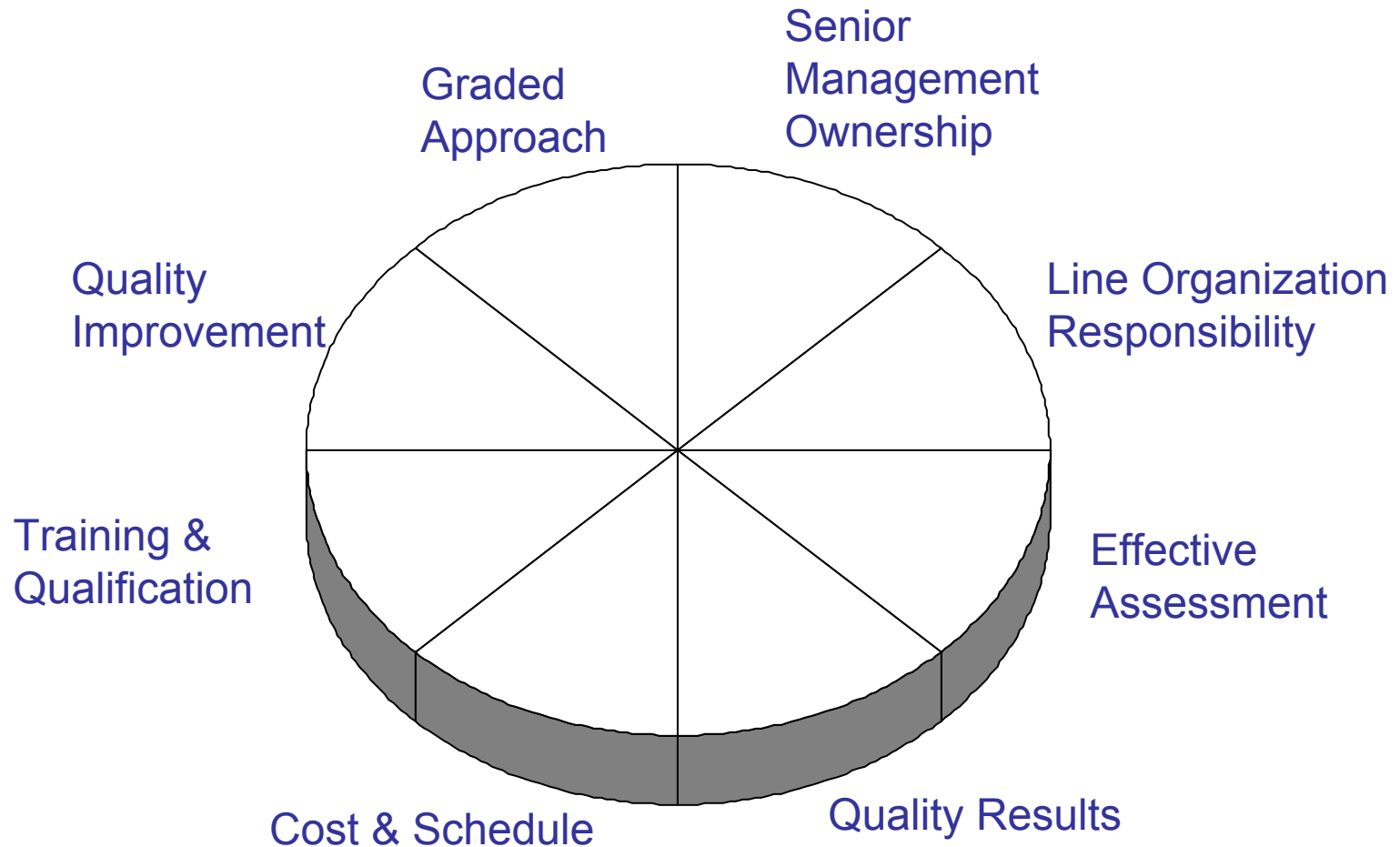
PERFORMANCE

- WORK PROCESSES
- DESIGN
- PROCUREMENT
- INSPECTION & ACCEPTANCE TESTING

ASSESSMENT

- MANAGEMENT ASSESSMENT
- INDEPENDENT ASSESSMENT

Value - Added By Implementing QA





Criterion 1: Program

- Senior Management Ownership
- Performance Objectives Established
- Responsibilities, Authorities, and Interfaces Established
- Individuals Empowered
- Application Based on Graded Approach



Criterion 2: Personnel Training & Qualification

- Affects All Personnel
- Stimulate Professional Development
- Designed to Address Specific Needs
- Maintain Proficiency and Promote Improvement
- Conduct On-going Review of Training Effectiveness



Criterion 3: Quality Improvement

- Standards and Measures for Performance
- Problem Identification, Control, Resolution, and Follow-up
- Cause Analysis
- Continuous Improvement
- Prevent Problems



Criterion 4: Documents & Records

- Scope of Documents and Records Defined
- Documents Identified and Controlled
- Records Identified and Controlled



Criterion 5: Work Processes

- Management Provides Training, Resources, and Direction
- Employees are Responsible for Their Work
- Review and Improve Processes



Criterion 6: Design

- Design Based on Sound Engineering/ Scientific Principles
- Changes Must Be Justified
- Interfaces Must Be Identified and Coordinated
- Verification Must Be Conducted



Criterion 7: Procurement

- Procured Items and Services Must Perform as Specified and Meet Requirements
- Use Qualified Suppliers
- Acceptance of Procured Items and Services in Accordance With Specified Methodology



Criterion 8:

Inspection And Acceptance Testing

- Inspection

- Conducted By or For the Line Organization
- Inspection Criteria Specified

- Acceptance Testing

- Conducted By or For the Line Organization
- Test and Acceptance Criteria Specified



Criterion 9: Management Assessment

- Focuses on Broad Categories of Management Issues
- Addresses How Well Integrated Management System is Working
- Management Responsibility and Participation



Criterion 10: Independent Assessment

- Implemented by Independent Organization Representing Senior Management
- Performance-Based Approach
- Technically Knowledgeable Personnel
- Focus on Improving Performance
- Scheduling Based on Performance