10.5

Assuring Quality

Learning Objectives

1. Describe the purpose and methods of quality assurance.

The purpose of quality assurance is to create confidence that the quality plan and controls are working properly. To assure quality, time must be allocated to review the original quality plan and compare that plan to how quality is being ensured during the execution of the project.

Process Analysis

The flowcharts of quality processes are compared to the processes followed during actual operations. If the plan was not followed, the process is analyzed and corrective action taken. The corrective action could be to educate the people involved on how to follow the quality plan or to revise the plan.

The experiments that sample products and processes and collect data are examined to see if they are following statistically valid sampling techniques and that the measurement methods have small enough tolerances to detect variation within control limits.
Because projects are temporary, there are fewer opportunities to learn and improve within one project if it has a short duration, but even in short projects, the quality manager should have a way to learn from experience and change the process for the next project of a similar complexity profile.

Analyzing Quality Processes in Safety Training

The technical college responsible for training employees in safe plant practices evaluates its instructor selection process at the end of the training to see if it had the best criteria for selection. For example, it required the instructors to have Masters degrees in manufacturing to qualify as college instructors. The college used an exit survey of the students to ask what they thought would improve the instruction of future classes on this topic. Some students felt that it would be more important to require that the instructors have more years of training experience, while others recommended that the college seek certification as a training center by the Occupational Safety and Health Administration (OSHA). The college considered these suggestions and decided to retain its requirement of a Master’s degree but add a requirement that the instructor be certified by OSHA in plant safety.

Key Takeaways

- The purpose of quality assurance is to build confidence in the client that quality standards and procedures are being followed. This is done by an internal review of the plan, testing, and revisions policies or by an audit of the same items performed by an external group or agency.
References


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