

3 Forest Ave. Swanzey, NH 03446 Phone: 603-209-0600

E-mail: <a href="mailto:OmbuEnterprises@msn.com">OmbuEnterprises@msn.com</a>

www.OmbuEnterprises.com

## **Corrective and Preventive Action – Clearing Up Confusion**

One of the most common sources of confusion in Quality Management is the difference between corrective action and preventive action. The confusion arises based on the "language trap". The definitions, in ISO 9000:2005, are clear, but colloquial language can cause misunderstanding.

Unraveling the issue starts with the concept of nonconformity. In quality, we work with requirements; they are needs or expectations, often stated in many ways. For our purposes, assume the requirement is explicit in a document such as a drawing, specification, work instruction, or contract.

Conformity means fulfillment of the requirement and, in contrast, failure to fulfill the requirement is a nonconformity. In general, there are two types of nonconformity – the ones we have uncovered (detected) and the ones that haven't happened yet (potential). For example, if verification reveals a part is larger then the upper specification limit on a drawing it is a detected nonconformity. However, if we don't tightly seal a drum it could leak, a potential nonconformity.

Having detected a nonconformity there are two important actions to take. The first action eliminates the nonconformity and the second eliminates the cause of the nonconformity. Eliminating the nonconformity is *correction* while eliminating the cause of the nonconformity is *corrective action*. This distinction is important and is a common confusion among terms.

The distinction is sharp in ISO 9000:2005 *Quality management systems* — Fundamentals and vocabulary.

- Clause 3.6.6 defines *correction* as action to eliminate a detected nonconformity.
- Clause 3.6.5 defines *corrective action* as action to eliminate the cause of a detected nonconformity or other undesirable situation.

Notice the qualification to a detected nonconformity. We find (detect) a nonconformity, perhaps during a quality audit. For example, the audit reveals that the authorized approver failed to sign a block of purchase orders. Correction would have the purchase orders signed, eliminating the nonconformity. Corrective action would understand the reason (cause) the authorized approver didn't sign the POs and eliminate it.

There are a number of approaches to eliminating the cause of a nonconformity. One common method follows the steps in ISO 9001:2008 clause 8.5.2 which requires a documented procedure for implementing corrective action.

In summary, detected nonconformities typically have two actions. The first is to eliminate the nonconformity, *i.e.*, **correction**. The second is to eliminate the cause of the nonconformity, *i.e.*, **corrective action**.

In contrast, potential nonconformities have only one action. Since the nonconformity is potential, not realized, we can't eliminate it; it hasn't happened yet. We can only keep it from happening. This is the role of **preventive action**. ISO 9000 clause 3.6.4 defines *preventive action* as action to eliminate the cause of a potential nonconformity or other undesirable potential situation.

Good examples of preventive action abound is personnel safety. For example, wearing safety glasses or hearing protection in some manufacturing areas can prevent potential nonconformances such as eye or ear damage.

Keeping the distinction clear, eliminating the confusion, is easy by applying a simple analysis. Identify the nonconformity and ask if it has happened. If so, it is a detected nonconformity.

<u>State the detected nonconformity</u>. This means you can identify the requirement and describe how the current state deviates.

- The upper specification limit for Dimension A is 1.37 inches, but all the pieces in the current lot fall between 1.38 and 1.40 inches.
- The Purchasing Manager must approve and sign all purchase orders for \$15,000 or above, but none of the purchase orders issued in September had the required signature.

State the correction. This means you say what you will do to eliminate the nonconformity.

- Rework the out-of-specification parts to bring them into specification.
- Review, approve, and sign all the purchase orders that are missing a signature.

<u>State the corrective action</u>. The corrective action eliminates the cause of the detected nonconformity, so it should not focus on just a symptom.

- The set-up card didn't agree with the most recent drawing and the operator used the set-up card for the job. Create a check list for all documents impacted by a drawing change.
- The Purchasing Manager had a baby at the beginning of September and was on maternity leave for the month. Establish and implement a procedure for alternate signature authority to cover long absences.

If it is a potential nonconformity the actions are similar, but there is no correction.

<u>State the potential nonconformity</u>. This means you can identify the requirement and describe how a future state may deviate.

• The material in these drums should not leak out. Unless the drum plugs are tight enough, the material could leak. The operators now closes them finger tight only.

<u>State the preventive action</u>. The preventive action eliminates the cause of the potential nonconformity, so it should not focus on just a symptom.

• Obtain drum wrenches so they are available to the operators. Train the operators in their use, and ask them to demonstrate the proper technique.