5.4 Maintenance

Purpose
The purpose of this procedure is to maintain infrastructure, work environment and equipment.

Responsibility
Local management is responsible for maintenance.

References
• ISO 9001:2015, chapter 7.1.3
• ISO 9001:2015, chapter 7.1.4
• Maintenance Plan & Record Form

Procedure
Where necessary to prevent breakdowns and malfunctioning of equipment used in the production and service provision, and in order to ensure that the work environment remains conducive to the operation of processes and to achieve product/service conformity, local management sets up a Maintenance Program.

Setting up the Maintenance Program
Local management establishes a formal program designed to
• ensure that key equipment operates as planned and without unexpected breakdowns or malfunctioning;
• ensure that important conditions of the work environment are maintained as planned.

Step 1: Selection
Local management determines equipment that is crucial for production/service provision and for which preventive maintenance should be conducted. Local management hereby considers all equipment, which may include devices, hardware, software, communications equipment, IT equipment, and transportation equipment.
Local management also determines particular characteristics of the work environment that require periodic maintenance activities.

**Step 2: Formalization**

Local management determines and formalizes a preventive maintenance program for each type of equipment and characteristics of work environment as determined in Step 1.

In the case of equipment, the maintenance program is generally based on the manufacturer’s recommended maintenance program, which may be modified appropriately if the equipment usage is not standard.

In the case of work environment, the maintenance program is generally based on the experience of local management.

Local management documents the maintenance program in writing. The program includes:

**What is Part of the Maintenance Program**

- **Description**
  Information that unambiguously describes the equipment or work environment or particular characteristic of the work environment
  - Example for equipment: serial number
  - Example for work environment: humidity of paint booth

- **Maintenance Intervals**
  Defined intervals at which maintenance activities are to be conducted
  - Examples for equipment: every 50 hours of operation, every 1,000 miles
  - Example for work environment: every day at 4:00 pm

- **Maintenance Activities**
  Defined maintenance activities that are to be conducted at the maintenance intervals
  - Example for equipment: change engine oil
  - Example for work environment: emptying all garbage cans, repainting floor markings
>> Tip: Use the Maintenance Plan & Record Form to document the maintenance plan.

Following the Maintenance Program
Management strives to ensure that all maintenance activities are conducted according to plan (i.e., according to the formalized maintenance program), and that all required maintenance records are kept.

Records
Maintenance records include the following information:

What is included in the Maintenance Records

1. Description
2. Maintenance Intervals – planned and actual
   Maintenance intervals per plan and when the maintenance was actually performed (for example, 50,000 km)
3. Maintenance Activities
4. Notes
   Notes regarding unusual observations
5. Name
   Person responsible for conducting
6. Date
   Date (and, if appropriate, time) of maintenance activity

Exempt from Record Keeping:
Local management may exempt from formal record keeping the following kinds of maintenance activities:

- Small maintenance tasks in which the burden of record keeping would outweigh the benefits of the task.
- Very frequent, small maintenance tasks